



**State of Louisiana**  
**Department of Environmental Quality**



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

October 6, 2004

MIKE D. McDANIEL, Ph.D.  
SECRETARY

CERTIFIED MAIL (7001 0320 0002 6643 4471)  
RETURN RECEIPT REQUESTED

**THE DOW CHEMICAL COMPANY**

c/o C T Corporation System  
Agent of Service  
8550 United Plaza Boulevard  
Baton Rouge, Louisiana 70809

**RE: ADMINISTRATIVE ORDER**  
**ENFORCEMENT TRACKING NO. AE-AO-04-0294**  
**AGENCY INTEREST NO. 1409**

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **ADMINISTRATIVE ORDER** is hereby served on **THE DOW CHEMICAL COMPANY (RESPONDENT)**.

Any questions concerning this action should be directed to Sonya Eastern at (225) 219-3937 or Jane LaCour at (225) 219-3716.

Sincerely,

Peggy M. Hatch  
Administrator  
Enforcement Division

PMH/JL/sf  
Alt ID No. 1280-00008  
Attachment



OFFICE OF ENVIRONMENTAL COMPLIANCE • P.O. BOX 4312 • BATON ROUGE, LOUISIANA 70821-4312

AN EQUAL OPPORTUNITY EMPLOYER



c: The Dow Chemical Company  
c/o Ms. Denise Hale  
Environmental, Health and Safety Services  
Post Office Box 150  
Plaquemine, Louisiana 79765-0150

**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE**

**IN THE MATTER**

**THE DOW CHEMICAL COMPANY  
IBERVILLE PARISH  
ALT ID NO. 1280-00008**

**PROCEEDINGS UNDER THE LOUISIANA  
ENVIRONMENTAL QUALITY ACT,  
La. R.S. 30:2001, ET SEQ.**

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**ENFORCEMENT TRACKING NO.**

**AE-AO-04-0294**

**AGENCY INTEREST NO.**

**1409**

**ADMINISTRATIVE ORDER**

The following **ADMINISTRATIVE ORDER** is issued to **THE DOW CHEMICAL COMPANY (RESPONDENT)** by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2011(D)(6) and (D)(14).

**FINDINGS OF FACT**

**I.**

The Respondent owns and/or operates an industrial organic and inorganic chemical manufacturing facility located 10 miles south of Port Allen, Louisiana Highway 1 in Plaquemine, Iberville Parish, Louisiana, which is within the 5-parish Baton Rouge Ozone Nonattainment area. The most recent emission inventory submitted by the Respondent for this facility indicates that

highly reactive volatile organic compounds (HRVOC) are emitted from the facility. For purposes of this **ADMINISTRATIVE ORDER**, HRVOC shall consist of 1,3-butadiene, butenes, ethylene, propylene, toluene and xylenes. The Respondent's facility operates under multiple air permits.

## II.

The Baton Rouge area is in violation of both the 1-hour and 8-hour National Ambient Air Quality Standard. Ozone concentrations above these standards are a public health concern. The Baton Rouge area was classified as a "serious" ozone nonattainment area for the 1-hour ozone standard under the Clean Air Act Amendments of 1990 and given until November 1999 to achieve attainment of the standard. Despite good progress, the area failed to achieve attainment of the standard by the 1999 deadline. In June 2003, the 5-parish Baton Rouge Ozone Nonattainment area was reclassified to the next higher or "severe" classification by operation of law and given a new attainment date of November 2005. The reclassification to "severe" status brought with it many new requirements such as reformulated gasoline, regulation of smaller businesses, increased emission offsets for new sources or modification of existing sources, and possible Clean Air Act Section 185 penalty fees if the area fails to attain the standard by the November 2005 deadline. These measures will have a serious economic impact on Louisiana.

## III.

In June of 2004, EPA began implementing a new 8-hour ozone standard, under which the 5-parish Baton Rouge area was designated nonattainment and assigned a "marginal" classification with an attainment date of June 2007.

#### IV.

Ozone modeling has indicated that a nitrogen oxides (NO<sub>x</sub>) control strategy is needed to reduce regional ozone levels in the Baton Rouge area, and measures are in place that will result in substantial reductions in local NO<sub>x</sub> emissions. It appears that volatile organic compounds (VOC) and NO<sub>x</sub> reductions that have been made are adequate to prevent exceedances of the standard under most weather conditions except when HRVOC are present. The Department's research over the past three years has shown that releases of HRVOC have been associated with recent peaking episodes of elevated ozone that have led to exceedances of the 1-hour and 8-hour standards. Over this period of time, local industries handling the HRVOC have been asked to look at their operations and devise means to reduce the releases of these compounds. However, extensive sampling this summer shows releases of HRVOC continue to be a problem. The Department has monitored over 100 releases of HRVOC between January and August of this year.

#### V.

In addition to the unhealthful air, the ozone exceedances experienced this summer now make it impossible for the Baton Rouge area to achieve attainment of the 1-hour ozone standard by the November 2005 deadline. This failure to achieve attainment could lead to the implementation of Section 185 annual penalty fees computed to be about \$100 million per year for industries in the 5-parish area.

#### VI.

Elevated ozone episodes this summer will also make it exceedingly difficult for the Baton Rouge area to achieve attainment of the 8-hour ozone standard by June of 2007 as required. Failure to achieve attainment by the 2007 deadline will likely result in a reclassification of the area upward

from a "marginal" to a "moderate" classification and will likely bring additional control measures for the area.

VII.

The continuing episodes of spiking ozone levels lead to periods of unhealthy air quality, and continuing burdensome requirements on industry, local businesses, local government, and the general public. Thus the Department requires the information outlined below to develop ozone control measures to protect the health of the citizens of Louisiana.

**ADMINISTRATIVE ORDER**

Based on the foregoing, Respondent is hereby ordered:

I.

To submit to the Department, for approval, a plan for a fenceline monitoring program. The Respondent shall submit this plan to the Department within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER** and implement the fenceline monitoring program by no later than March 1, 2005. At a minimum, the fenceline monitoring program shall include the requirements listed in Attachment 1.

II.

To the extent required by law, further proceedings relating to this **ADMINISTRATIVE ORDER** will be governed by the Administrative Procedure Act, La. R.S. 49:950, et seq.

III.


For each action or event described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by

law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

IV.

This **ADMINISTRATIVE ORDER** is effective upon receipt.

Baton Rouge, Louisiana, this 6<sup>th</sup> day of October, 2004.

  
Mike D. McDaniel, Ph.D.  
Secretary

Copies of correspondence should be sent to:

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312  
Attention: Jane LaCour

## Attachment 1

### Fence line Air Monitoring Requirements

Each facility shall be required to install a minimum of four air-monitoring stations. These stations should be located on or near the facility property boundary with at least one station positioned on each of the four main compass points (north, east, south, west) from the center of the facility. At least two of the stations shall be supplemented with a 10-meter meteorological tower equipped with sensors to continuously measure wind speed and direction. One meteorological tower shall be located in the predominant downwind direction from the center of the facility and another located in the predominant upwind direction from the center of the facility. The meteorological data shall be recorded & submitted to the Department as 10-minute averages.

Each monitoring station shall be equipped with a continuous total non-methane organic carbon (TNMOC) analyzer capable of detecting VOC concentrations of 0.1 ppm or less for each 10-minute period. This analyzer shall be operated year round with a data completeness of at least 85%. All data shall be recorded and submitted to the Department (Excel format) as 10-minute averages. The analyzer shall be integrated with a summa canister sampler capable of automatically collecting a 20-minute air sample (trigger sample) when the analyzer exceeds a predetermined concentration threshold. This threshold should be adjusted to insure a minimum of 5 samples are triggered each month when the meteorological data indicate the sample was impacted by emissions from the facility. Each canister sample shall be analyzed via gas chromatography/flame ionization detection for a compound target list approved by the Department. This target list shall include all ozone precursor VOCs emitted in significant amounts and any of the highly reactive volatile organic compounds emitted by the facility. The highly reactive VOCs include ethylene, propylene, butanes, 1,3-butadiene, toluene and xylenes. The analytical & quality assurance procedures shall be consistent with the ozone precursor analysis method outlined in EPA 600-R-98/161. The minimum detection limits for the analysis as calculated by the method set forth in 40 CFR Part 36(b) shall be no greater than 10 ppbC for each of the target analytes. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

In addition, each facility shall install a summa canister sampler capable of collecting a 24-hour integrated sample once every six days. The sampler may be located at one of the air monitoring stations or as an alternative may be installed off-site in a location determined to be in the predominant down-wind direction. This sample shall be analyzed by EPA method TO-14 or TO-15 to determine if any of the Louisiana ambient air quality standards for VOCs (see LAC 33:III.5112, Table 51.2) are being exceeded. The target analytes for these samples shall include at least the following compounds: 1,3-butadiene, vinyl chloride, 1,2-dichloroethane, benzene, toluene, chloroform, and methylene chloride. The minimum detection limits for each of the target analytes as calculated by the method set forth in 40 CFR Part 36(b) shall be the lesser of 0.5 ppbv or the applicable Louisiana annual average ambient air standard. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.





State of Louisiana  
Department of Environmental Quality



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

October 6, 2004

MIKE D. McDANIEL, Ph.D.  
SECRETARY

CERTIFIED MAIL (7002 0460 0002 6054 7913)  
RETURN RECEIPT REQUESTED

**SYNGENTA CROP PROTECTION, INC.**

c/o C T Corporation System  
Agent of Service  
8550 United Plaza Blvd.  
Baton Rouge, LA 70809

**RE: ADMINISTRATIVE ORDER  
ENFORCEMENT TRACKING NO. AE-AO-04-0309  
AGENCY INTEREST NO. 2367**

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **ADMINISTRATIVE ORDER** is hereby served on **SYNGENTA CROP PROTECTION, INC. (RESPONDENT)**.

Any questions concerning this action should be directed to Sonya Eastern at (225) 219-3937 or Jane LaCour at (225) 219-3716.

Sincerely,

Peggy M. Hatch  
Administrator  
Enforcement Division

PMH/JCM/jl  
Alt ID No. 1280-00007  
Attachment

c: Syngenta Crop Protection, Inc.  
c/o Kathryn Herrold, Environmental Regulatory Affairs  
P.O. Box 11  
St. Gabriel, LA 70776



OFFICE OF ENVIRONMENTAL COMPLIANCE • P.O. BOX 4312 • BATON ROUGE, LOUISIANA 70821-4312

AN EQUAL OPPORTUNITY EMPLOYER



**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE**

**IN THE MATTER**

**SYNGENTA CROP PROTECTION, INC.  
IBERVILLE PARISH  
ALT ID NO. 1280-00007**

**ENFORCEMENT TRACKING NO.**

**AE-AO-04-0309**

**AGENCY INTEREST NO.**

**PROCEEDINGS UNDER THE LOUISIANA  
ENVIRONMENTAL QUALITY ACT,  
La. R.S. 30:2001, ET SEQ.**

**2367**

**ADMINISTRATIVE ORDER**

The following **ADMINISTRATIVE ORDER** is issued to **SYNGENTA CROP PROTECTION, INC. (RESPONDENT)** by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2011(D)(6) and (D)(14).

**FINDINGS OF FACT**

**I.**

The Respondent owns and/or operates an agricultural chemical production facility located at or near St. Gabriel in Iberville Parish, Louisiana, which is within the 5-parish Baton Rouge Ozone Nonattainment area. The most recent emission inventory submitted by the Respondent for this facility indicates that highly reactive volatile organic compounds (HRVOC) are emitted from the

facility. For purposes of this **ADMINISTRATIVE ORDER**, HRVOC shall consist of 1,3-butadiene, butenes, ethylene, propylene, toluene and xylenes. The facility currently operates under several Air Quality Permits.

## II.

The Baton Rouge area is in violation of both the 1-hour and 8-hour National Ambient Air Quality Standard. Ozone concentrations above these standards are a public health concern. The Baton Rouge area was classified as a "serious" ozone nonattainment area for the 1-hour ozone standard under the Clean Air Act Amendments of 1990 and given until November 1999 to achieve attainment of the standard. Despite good progress, the area failed to achieve attainment of the standard by the 1999 deadline. In June 2003, the 5-parish Baton Rouge Ozone Nonattainment area was reclassified to the next higher or "severe" classification by operation of law and given a new attainment date of November 2005. The reclassification to "severe" status brought with it many new requirements such as reformulated gasoline, regulation of smaller businesses, increased emission offsets for new sources or modification of existing sources, and possible Clean Air Act Section 185 penalty fees if the area fails to attain the standard by the November 2005 deadline. These measures will have a serious economic impact on Louisiana.

## III.

In June of 2004, EPA began implementing a new 8-hour ozone standard, under which the 5-parish Baton Rouge area was designated nonattainment and assigned a "marginal" classification with an attainment date of June 2007.

#### IV.

Ozone modeling has indicated that a nitrogen oxides (NO<sub>x</sub>) control strategy is needed to reduce regional ozone levels in the Baton Rouge area, and measures are in place that will result in substantial reductions in local NO<sub>x</sub> emissions. It appears that volatile organic compounds (VOC) and NO<sub>x</sub> reductions that have been made are adequate to prevent exceedances of the standard under most weather conditions except when HRVOC are present. The Department's research over the past three years has shown that releases of HRVOC have been associated with recent peaking episodes of elevated ozone that have led to exceedances of the 1-hour and 8-hour standards. Over this period of time, local industries handling the HRVOC have been asked to look at their operations and devise means to reduce the releases of these compounds. However, extensive sampling this summer shows releases of HRVOC continue to be a problem. The Department has monitored over 100 releases of HRVOC between January and August of this year.

#### V.

In addition to the unhealthy air, the ozone exceedances experienced this summer now make it impossible for the Baton Rouge area to achieve attainment of the 1-hour ozone standard by the November 2005 deadline. This failure to achieve attainment could lead to the implementation of Section 185 annual penalty fees computed to be about \$100 million per year for industries in the 5-parish area.

#### VI.

Elevated ozone episodes this summer will also make it exceedingly difficult for the Baton Rouge area to achieve attainment of the 8-hour ozone standard by June of 2007 as required. Failure to achieve attainment by the 2007 deadline will likely result in a reclassification of the area upward

from a “marginal” to a “moderate” classification and will likely bring additional control measures for the area.

## VII.

The continuing episodes of spiking ozone levels lead to periods of unhealthy air quality, and continuing burdensome requirements on industry, local businesses, local government, and the general public. Thus the Department requires the information outlined below to develop ozone control measures to protect the health of the citizens of Louisiana.

### **ADMINISTRATIVE ORDER**

Based on the foregoing, Respondent is hereby ordered:

#### I.

To submit to the Department, for approval, a plan for a fenceline monitoring program. The Respondent shall submit this plan to the Department within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER** and implement the fenceline monitoring program by no later than March 1, 2005. At a minimum, the fenceline monitoring program shall include the requirements listed in Attachment 1.

#### II.

To the extent required by law, further proceedings relating to this **ADMINISTRATIVE ORDER** will be governed by the Administrative Procedure Act, La. R.S. 49:950, et seq.

#### III.

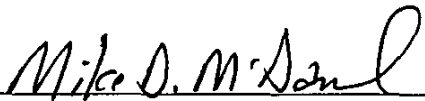
For each action or event described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by

law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

IV.

This **ADMINISTRATIVE ORDER** is effective upon receipt.

Baton Rouge, Louisiana, this 6<sup>th</sup> day of October, 2004.

  
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Mike D. McDaniel, Ph.D.  
Secretary

Copies of correspondence should be sent to:

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312  
Attention: Jane LaCour

# Attachment 1

## Fence line Air Monitoring Requirements

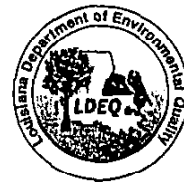
Each facility shall be required to install a minimum of four air-monitoring stations. These stations should be located on or near the facility property boundary with at least one station positioned on each of the four main compass points (north, east, south, west) from the center of the facility. At least two of the stations shall be supplemented with a 10-meter meteorological tower equipped with sensors to continuously measure wind speed and direction. One meteorological tower shall be located in the predominant downwind direction from the center of the facility and another located in the predominant upwind direction from the center of the facility. The meteorological data shall be recorded & submitted to the Department as 10-minute averages.

Each monitoring station shall be equipped with a continuous total non-methane organic carbon (TNMOC) analyzer capable of detecting VOC concentrations of 0.1 ppm or less for each 10-minute period. This analyzer shall be operated year round with a data completeness of at least 85%. All data shall be recorded and submitted to the Department (Excel format) as 10-minute averages. The analyzer shall be integrated with a summa canister sampler capable of automatically collecting a 20-minute air sample (trigger sample) when the analyzer exceeds a predetermined concentration threshold. This threshold should be adjusted to insure a minimum of 5 samples are triggered each month when the meteorological data indicate the sample was impacted by emissions from the facility. Each canister sample shall be analyzed via gas chromatography/flame ionization detection for a compound target list approved by the Department. This target list shall include all ozone precursor VOCs emitted in significant amounts and any of the highly reactive volatile organic compounds emitted by the facility. The highly reactive VOCs include ethylene, propylene, butanes, 1,3-butadiene, toluene and xylenes. The analytical & quality assurance procedures shall be consistent with the ozone precursor analysis method outlined in EPA 600-R-98/161. The minimum detection limits for the analysis as calculated by the method set forth in 40 CFR Part 36(b) shall be no greater than 10 ppbC for each of the target analytes. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

In addition, each facility shall install a summa canister sampler capable of collecting a 24-hour integrated sample once every six days. The sampler may be located at one of the air monitoring stations or as an alternative may be installed off-site in a location determined to be in the predominant down-wind direction. This sample shall be analyzed by EPA method TO-14 or TO-15 to determine if any of the Louisiana ambient air quality standards for VOCs (see LAC 33:III.5112, Table 51.2) are being exceeded. The target analytes for these samples shall include at least the following compounds: 1,3-butadiene, vinyl chloride, 1,2-dichloroethane, benzene, toluene, chloroform, and methylene chloride. The minimum detection limits for each of the target analytes as calculated by the method set forth in 40 CFR Part 36(b) shall be the lesser of 0.5 ppbv or the applicable Louisiana annual average ambient air standard. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.



**State of Louisiana**  
**Department of Environmental Quality**



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

October 6, 2004

MIKE D. McDANIEL, Ph.D.  
SECRETARY

CERTIFIED MAIL (7003 2260 0000 5823 2224)  
RETURN RECEIPT REQUESTED

**PLANTATION PIPE LINE COMPANY**  
c/o Corporation Service Company  
Agent of Service  
320 Somerulos Street  
Baton Rouge, Louisiana 70802-6129

**RE: ADMINISTRATIVE ORDER**  
**ENFORCEMENT TRACKING NO. AE-AO-04-0306**  
**AGENCY INTEREST NO. 582**

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **ADMINISTRATIVE ORDER** is hereby served on **PLANTATION PIPE LINE COMPANY (RESPONDENT)**.

Any questions concerning this action should be directed to Sonya Eastern at (225) 219-3937 or Jane LaCour at (225) 219-3716.

Sincerely,

Peggy M. Hatch  
Administrator  
Enforcement Division

PMH/CML/cml  
Alt ID No. 0840-00053  
Attachment

c: Plantation Pipe Line Company  
c/o Mr. Earl J. Crochet, Operations Manager  
Post Office Box 1871  
Baton Rouge, Louisiana 70821-1871



**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE**

**IN THE MATTER**

**PLANTATION PIPE LINE COMPANY  
EAST BATON ROUGE PARISH  
ALT ID NO. 0840-00053**

**PROCEEDINGS UNDER THE LOUISIANA  
ENVIRONMENTAL QUALITY ACT,  
La. R.S. 30:2001, ET SEQ.**

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**ENFORCEMENT TRACKING NO.**

**AE-AO-04-0306**

**AGENCY INTEREST NO.**

**582**

**ADMINISTRATIVE ORDER**

The following **ADMINISTRATIVE ORDER** is issued to **PLANTATION PIPE LINE COMPANY (RESPONDENT)** by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2011(D)(6) and (D)(14).

**FINDINGS OF FACT**

**I.**

The Respondent owns and/or operates the Baton Rouge Breakout Tank Farm facility located at 2200 Blount Road in Baton Rouge, East Baton Rouge Parish, Louisiana, which is within the 5-parish Baton Rouge Ozone Nonattainment area. The most recent emission inventory submitted by the Respondent for this facility indicates that highly reactive volatile organic compounds (HRVOC) are emitted from the facility. For purposes of this **ADMINISTRATIVE ORDER**, HRVOC shall

of 1,3-butadiene, butenes, ethylene, propylene, toluene and xylenes. The facility operates under multiple air permits and exemptions.

## II.

The Baton Rouge area is in violation of both the 1-hour and 8-hour National Ambient Air Quality Standard. Ozone concentrations above these standards are a public health concern. The Baton Rouge area was classified as a "serious" ozone nonattainment area for the 1-hour ozone standard under the Clean Air Act Amendments of 1990 and given until November 1999 to achieve attainment of the standard. Despite good progress, the area failed to achieve attainment of the standard by the 1999 deadline. In June 2003, the 5-parish Baton Rouge Ozone Nonattainment area was reclassified to the next higher or "severe" classification by operation of law and given a new attainment date of November 2005. The reclassification to "severe" status brought with it many new requirements such as reformulated gasoline, regulation of smaller businesses, increased emission offsets for new sources or modification of existing sources, and possible Clean Air Act Section 185 penalty fees if the area fails to attain the standard by the November 2005 deadline. These measures will have a serious economic impact on Louisiana.

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substantial reductions in local NO<sub>x</sub> emissions. It appears that volatile organic compounds (VOC) and NO<sub>x</sub> reductions that have been made are adequate to prevent exceedances of the standard under most weather conditions except when HRVOC are present. The Department's research over the past three years has shown that releases of HRVOC have been associated with recent peaking episodes of elevated ozone that have led to exceedances of the 1-hour and 8-hour standards. Over this period of time, local industries handling the HRVOC have been asked to look at their operations and devise means to reduce the releases of these compounds. However, extensive sampling this summer shows releases of HRVOC continue to be a problem. The Department has monitored over 100 releases of HRVOC between January and August of this year.

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### **ADMINISTRATIVE ORDER**

Based on the foregoing, Respondent is **hereby ordered**:

#### I.

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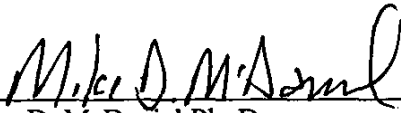
#### III.

For each action or event described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

IV.

This **ADMINISTRATIVE ORDER** is effective upon receipt.

Baton Rouge, Louisiana, this 6<sup>th</sup> day of October, 2004.

  
Mike D. McDaniel Ph. D.  
Secretary

Copies of correspondence should be sent to:

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312  
Attention: Jane Lacour

## Attachment 1

### Fence line Air Monitoring Requirements

Each facility shall be required to install a minimum of four air-monitoring stations. These stations should be located on or near the facility property boundary with at least one station positioned on each of the four main compass points (north, east, south, west) from the center of the facility. At least two of the stations shall be supplemented with a 10-meter meteorological tower equipped with sensors to continuously measure wind speed and direction. One meteorological tower shall be located in the predominant downwind direction from the center of the facility and another located in the predominant upwind direction from the center of the facility. The meteorological data shall be recorded & submitted to the Department as 10-minute averages.

Each monitoring station shall be equipped with a continuous total non-methane organic carbon (TNMOC) analyzer capable of detecting VOC concentrations of 0.1 ppm or less for each 10-minute period. This analyzer shall be operated year round with a data completeness of at least 85%. All data shall be recorded and submitted to the Department (Excel format) as 10-minute averages. The analyzer shall be integrated with a summa canister sampler capable of automatically collecting a 20-minute air sample (trigger sample) when the analyzer exceeds a predetermined concentration threshold. This threshold should be adjusted to insure a minimum of 5 samples are triggered each month when the meteorological data indicate the sample was impacted by emissions from the facility. Each canister sample shall be analyzed via gas chromatography/flame ionization detection for a compound target list approved by the Department. This target list shall include all ozone precursor VOCs emitted in significant amounts and any of the highly reactive volatile organic compounds emitted by the facility. The highly reactive VOCs include ethylene, propylene, butanes, 1,3-butadiene, toluene and xylenes. The analytical & quality assurance procedures shall be consistent with the ozone precursor analysis method outlined in EPA 600-R-98/161. The minimum detection limits for the analysis as calculated by the method set forth in 40 CFR Part 36(b) shall be no greater than 10 ppbC for each of the target analytes. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

In addition, each facility shall install a summa canister sampler capable of collecting a 24-hour integrated sample once every six days. The sampler may be located at one of the air monitoring stations or as an alternative may be installed off-site in a location determined to be in the predominant down-wind direction. This sample shall be analyzed by EPA method TO-14 or TO-15 to determine if any of the Louisiana ambient air quality standards for VOCs (see LAC 33:III.5112, Table 51.2) are being exceeded. The target analytes for these samples shall include at least the following compounds: 1,3-butadiene, vinyl chloride, 1,2-dichloroethane, benzene, toluene, chloroform, and methylene chloride. The minimum detection limits for each of the target analytes as calculated by the method set forth in 40 CFR Part 36(b) shall be the lesser of 0.5 ppbv or the applicable Louisiana annual average ambient air standard. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.



State of Louisiana  
Department of Environmental Quality



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

October 6, 2004

MIKE D. McDANIEL, Ph.D.  
SECRETARY

CERTIFIED MAIL (7002 0460 0002 6054 2833)  
RETURN RECEIPT REQUESTED

**DSM COPOLYMER, INC.**  
c/o C T Corporation System  
Agent of Service  
8550 United Plaza Boulevard  
Baton Rouge, Louisiana 70809

**RE: ADMINISTRATIVE ORDER  
ENFORCEMENT TRACKING NO. AE-AO-04-0305  
AGENCY INTEREST NO. 1395**

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **ADMINISTRATIVE ORDER** is hereby served on **DSM COPOLYMER, INC. (RESPONDENT)**.

Any questions concerning this action should be directed to Sonya Eastern at (225) 219-3739 or Jane Lacour at (225) 219-3716.

Sincerely,

Peggy M. Hatch  
Administrator  
Enforcement Division

PMH/BDM/bdm  
Alt ID No. 0840-00008  
Attachment



OFFICE OF ENVIRONMENTAL COMPLIANCE • P.O. BOX 4312 • BATON ROUGE, LOUISIANA 70821-4312

AN EQUAL OPPORTUNITY EMPLOYER



c: Ralph Booker, Plant Manager  
DSM Copolymer, Inc. Baton Rouge Plant  
5955 Scenic Highway  
Baton Rouge, Louisiana 70805



**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE**

**IN THE MATTER**

**DSM COPOLYMER, INC.  
EAST BATON ROUGE PARISH  
ALT ID NO. 0840-00008**

**PROCEEDINGS UNDER THE LOUISIANA  
ENVIRONMENTAL QUALITY ACT,  
La. R.S. 30:2001, ET SEQ.**

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**ENFORCEMENT TRACKING NO.**

**AE-AO-04-0305**

**AGENCY INTEREST NO.**

**1395**

**ADMINISTRATIVE ORDER**

The following **ADMINISTRATIVE ORDER** is issued to **DSM COPOLYMER, INC.** (**RESPONDENT**) by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2011(D)(6) and (D)(14).

**FINDINGS OF FACT**

**I.**

The Respondent owns and/or operates a rubber manufacturing facility located at 5955 Scenic Highway in Baton Rouge, East Baton Rouge Parish, Louisiana, which is within the 5-parish Baton Rouge Ozone Nonattainment area. The most recent emission inventory submitted by the Respondent

for this facility indicates that highly reactive volatile organic compounds (HRVOC) are emitted from the facility. For purposes of this **ADMINISTRATIVE ORDER**, HRVOC shall consist of 1,3-butadiene, butenes, ethylene, propylene, toluene and xylenes.

## II.

The Baton Rouge area is in violation of both the 1-hour and 8-hour National Ambient Air Quality Standard. Ozone concentrations above these standards are a public health concern. The Baton Rouge area was classified as a "serious" ozone nonattainment area for the 1-hour ozone standard under the Clean Air Act Amendments of 1990 and given until November 1999 to achieve attainment of the standard. Despite good progress, the area failed to achieve attainment of the standard by the 1999 deadline. In June 2003, the 5-parish Baton Rouge Ozone Nonattainment area was reclassified to the next higher or "severe" classification by operation of law and given a new attainment date of November 2005. The reclassification to "severe" status brought with it many new requirements such as reformulated gasoline, regulation of smaller businesses, increased emission offsets for new sources or modification of existing sources, and possible Clean Air Act Section 185 penalty fees if the area fails to attain the standard by the November 2005 deadline. These measures will have a serious economic impact on Louisiana.

## III.

In June of 2004, EPA began implementing a new 8-hour ozone standard, under which the 5-parish Baton Rouge area was designated nonattainment and assigned a "marginal" classification with an attainment date of June 2007.

#### IV.

Ozone modeling has indicated that a nitrogen oxides (NO<sub>x</sub>) control strategy is needed to reduce regional ozone levels in the Baton Rouge area, and measures are in place that will result in substantial reductions in local NO<sub>x</sub> emissions. It appears that volatile organic compounds (VOC) and NO<sub>x</sub> reductions that have been made are adequate to prevent exceedances of the standard under most weather conditions except when HRVOC are present. The Department's research over the past three years has shown that releases of HRVOC have been associated with recent peaking episodes of elevated ozone that have led to exceedances of the 1-hour and 8-hour standards. Over this period of time, local industries handling the HRVOC have been asked to look at their operations and devise means to reduce the releases of these compounds. However, extensive sampling this summer shows releases of HRVOC continue to be a problem. The Department has monitored over 100 releases of HRVOC between January and August of this year.

#### V.

In addition to the unhealthful air, the ozone exceedances experienced this summer now make it impossible for the Baton Rouge area to achieve attainment of the 1-hour ozone standard by the November 2005 deadline. This failure to achieve attainment could lead to the implementation of Section 185 annual penalty fees computed to be about \$100 million per year for industries in the 5-parish area.

#### VI.

Elevated ozone episodes this summer will also make it exceedingly difficult for the Baton Rouge area to achieve attainment of the 8-hour ozone standard by June of 2007 as required. Failure to achieve attainment by the 2007 deadline will likely result in a reclassification of the area upward

from a "marginal" to a "moderate" classification and will likely bring additional control measures for the area.

VII.

The continuing episodes of spiking ozone levels lead to periods of unhealthy air quality, and continuing burdensome requirements on industry, local businesses, local government, and the general public. Thus the Department requires the information outlined below to develop ozone control measures to protect the health of the citizens of Louisiana.

**ADMINISTRATIVE ORDER**

Based on the foregoing, Respondent is hereby ordered:

I.

To submit to the Department, for approval, a plan for a fenceline monitoring program. The Respondent shall submit this plan to the Department within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER** and implement the fenceline monitoring program by no later than March 1, 2005. At a minimum, the fenceline monitoring program shall include the requirements listed in Attachment 1.

II.

To the extent required by law, further proceedings relating to this **ADMINISTRATIVE ORDER** will be governed by the Administrative Procedure Act, La. R.S. 49:950, et seq.

III.

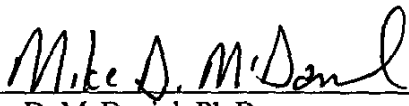
For each action or event described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by

law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

IV.

This **ADMINISTRATIVE ORDER** is effective upon receipt.

Baton Rouge, Louisiana, this 6<sup>th</sup> day of October, 2004.

  
\_\_\_\_\_  
Mike D. McDaniel, Ph.D.  
Secretary  
Department of Environmental Quality

Copies of correspondence should be sent to:

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312  
Attention: Jane Lacour

# Attachment 1

## Fence line Air Monitoring Requirements

Each facility shall be required to install a minimum of four air-monitoring stations. These stations should be located on or near the facility property boundary with at least one station positioned on each of the four main compass points (north, east, south, west) from the center of the facility. At least two of the stations shall be supplemented with a 10-meter meteorological tower equipped with sensors to continuously measure wind speed and direction. One meteorological tower shall be located in the predominant downwind direction from the center of the facility and another located in the predominant upwind direction from the center of the facility. The meteorological data shall be recorded & submitted to the Department as 10-minute averages.

Each monitoring station shall be equipped with a continuous total non-methane organic carbon (TNMOC) analyzer capable of detecting VOC concentrations of 0.1 ppm or less for each 10-minute period. This analyzer shall be operated year round with a data completeness of at least 85%. All data shall be recorded and submitted to the Department (Excel format) as 10-minute averages. The analyzer shall be integrated with a summa canister sampler capable of automatically collecting a 20-minute air sample (trigger sample) when the analyzer exceeds a predetermined concentration threshold. This threshold should be adjusted to insure a minimum of 5 samples are triggered each month when the meteorological data indicate the sample was impacted by emissions from the facility. Each canister sample shall be analyzed via gas chromatography/flame ionization detection for a compound target list approved by the Department. This target list shall include all ozone precursor VOCs emitted in significant amounts and any of the highly reactive volatile organic compounds emitted by the facility. The highly reactive VOCs include ethylene, propylene, butanes, 1,3-butadiene, toluene and xylenes. The analytical & quality assurance procedures shall be consistent with the ozone precursor analysis method outlined in EPA 600-R-98/161. The minimum detection limits for the analysis as calculated by the method set forth in 40 CFR Part 36(b) shall be no greater than 10 ppbC for each of the target analytes. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

In addition, each facility shall install a summa canister sampler capable of collecting a 24-hour integrated sample once every six days. The sampler may be located at one of the air monitoring stations or as an alternative may be installed off-site in a location determined to be in the predominant down-wind direction. This sample shall be analyzed by EPA method TO-14 or TO-15 to determine if any of the Louisiana ambient air quality standards for VOCs (see LAC 33:III.5112, Table 51.2) are being exceeded. The target analytes for these samples shall include at least the following compounds: 1,3-butadiene, vinyl chloride, 1,2-dichloroethane, benzene, toluene, chloroform, and methylene chloride. The minimum detection limits for each of the target analytes as calculated by the method set forth in 40 CFR Part 36(b) shall be the lesser of 0.5 ppbv or the applicable Louisiana annual average ambient air standard. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.



State of Louisiana  
Department of Environmental Quality



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

October 6, 2004

MIKE D. McDANIEL, Ph.D.  
SECRETARY

CERTIFIED MAIL (7002 2030 0002 8907 5654)  
RETURN RECEIPT REQUESTED

UNIROYAL CHEMICAL COMPANY, INC.  
c/o Corporation Service Company  
Agent of Service  
320 Somerulos Street  
Baton Rouge, Louisiana 70802-6129

RE: ADMINISTRATIVE ORDER  
ENFORCEMENT TRACKING NO. AE-AO-04-0303  
AGENCY INTEREST NO. 1433

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **ADMINISTRATIVE ORDER** is hereby served on **UNIROYAL CHEMICAL COMPANY, INC.** (RESPONDENT).

Any questions concerning this action should be directed to Sonya Eastern at (225) 219-3937 or Jane LaCour at (225) 219-3716.

Sincerely,

Peggy M. Hatch  
Administrator  
Enforcement Division

PMH/RO/ro  
Alt ID No. 0180-00012  
Attachment

c: Mr. W. Keith Baggett, Factory Manager  
Uniroyal Chemical Company, Inc.  
d/b/a Crompton Manufacturing Company  
Post Office Box 397  
Geismar, Louisiana 70734

**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE**

**IN THE MATTER**

**UNIROYAL CHEMICAL COMPANY, INC.  
ASCENSION PARISH  
ALT ID NO. 0180-00012**

**PROCEEDINGS UNDER THE LOUISIANA  
ENVIRONMENTAL QUALITY ACT,  
La. R.S. 30:2001, ET SEQ.**

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**ENFORCEMENT TRACKING NO.**

**AE-AO-04-0303**

**AGENCY INTEREST NO.**

**1433**

**ADMINISTRATIVE ORDER**

The following **ADMINISTRATIVE ORDER** is issued to **UNIROYAL CHEMICAL COMPANY, INC. (RESPONDENT)** by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2011(D)(6) and (D)(14).

**FINDINGS OF FACT**

**I.**

The Respondent owns and/or operates a chemical manufacturing plant d/b/a Crompton Manufacturing Company located at or near 36191 Louisiana Highway 30 in Geismar, Ascension Parish, Louisiana, which is within the 5-parish Baton Rouge Ozone Nonattainment area. The most recent emission inventory submitted by the Respondent for this facility indicates that highly reactive



volatile organic compounds (HRVOC) are emitted from the facility. For purposes of this **ADMINISTRATIVE ORDER**, HRVOC shall consist of 1,3-butadiene, butenes, ethylene, propylene, toluene and xylenes. The facility operates under multiple air permits.

## II.

The Baton Rouge area is in violation of both the 1-hour and 8-hour National Ambient Air Quality Standard. Ozone concentrations above these standards are a public health concern. The Baton Rouge area was classified as a "serious" ozone nonattainment area for the 1-hour ozone standard under the Clean Air Act Amendments of 1990 and given until November 1999 to achieve attainment of the standard. Despite good progress, the area failed to achieve attainment of the standard by the 1999 deadline. In June 2003, the 5-parish Baton Rouge Ozone Nonattainment area was reclassified to the next higher or "severe" classification by operation of law and given a new attainment date of November 2005. The reclassification to "severe" status brought with it many new requirements such as reformulated gasoline, regulation of smaller businesses, increased emission offsets for new sources or modification of existing sources, and possible Clean Air Act Section 185 penalty fees if the area fails to attain the standard by the November 2005 deadline. These measures will have a serious economic impact on Louisiana.

## III.

In June of 2004, EPA began implementing a new 8-hour ozone standard, under which the 5-parish Baton Rouge area was designated nonattainment and assigned a "marginal" classification with an attainment date of June 2007.

#### IV.

Ozone modeling has indicated that a nitrogen oxides (NO<sub>x</sub>) control strategy is needed to reduce regional ozone levels in the Baton Rouge area, and measures are in place that will result in substantial reductions in local NO<sub>x</sub> emissions. It appears that volatile organic compounds (VOC) and NO<sub>x</sub> reductions that have been made are adequate to prevent exceedances of the standard under most weather conditions except when HRVOC are present. The Department's research over the past three years has shown that releases of HRVOC have been associated with recent peaking episodes of elevated ozone that have led to exceedances of the 1-hour and 8-hour standards. Over this period of time, local industries handling the HRVOC have been asked to look at their operations and devise means to reduce the releases of these compounds. However, extensive sampling this summer shows releases of HRVOC continue to be a problem. The Department has monitored over 100 releases of HRVOC between January and August of this year.

#### V.

In addition to the unhealthful air, the ozone exceedances experienced this summer now make it impossible for the Baton Rouge area to achieve attainment of the 1-hour ozone standard by the November 2005 deadline. This failure to achieve attainment could lead to the implementation of Section 185 annual penalty fees computed to be about \$100 million per year for industries in the 5-parish area.

VI.

Elevated ozone episodes this summer will also make it exceedingly difficult for the Baton Rouge area to achieve attainment of the 8-hour ozone standard by June of 2007 as required. Failure to achieve attainment by the 2007 deadline will likely result in a reclassification of the area upward from a "marginal" to a "moderate" classification and will likely bring additional control measures for the area.

VII.

The continuing episodes of spiking ozone levels lead to periods of unhealthy air quality, and continuing burdensome requirements on industry, local businesses, local government, and the general public. Thus the Department requires the information outlined below to develop ozone control measures to protect the health of the citizens of Louisiana.

**ADMINISTRATIVE ORDER**

Based on the foregoing, Respondent is hereby ordered:

I.

To submit to the Department, for approval, a plan for a fenceline monitoring program. The Respondent shall submit this plan to the Department within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER** and implement the fenceline monitoring program by no later than March 1, 2005. At a minimum, the fenceline monitoring program shall include the requirements listed in Attachment 1.

II.

To the extent required by law, further proceedings relating to this **ADMINISTRATIVE ORDER** will be governed by the Administrative Procedure Act, La. R.S. 49:950, et seq.

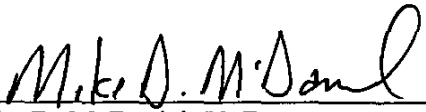
III.

For each action or event described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

IV.

This **ADMINISTRATIVE ORDER** is effective upon receipt.

Baton Rouge, Louisiana, this 6<sup>th</sup> day of October, 2004.

  
\_\_\_\_\_  
Mike D. McDaniel, Ph.D.  
Secretary

Copies of correspondence should be sent to:

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312  
Attention: Jane LaCour

## Attachment 1

### Fence line Air Monitoring Requirements

Each facility shall be required to install a minimum of four air-monitoring stations. These stations should be located on or near the facility property boundary with at least one station positioned on each of the four main compass points (north, east, south, west) from the center of the facility. At least two of the stations shall be supplemented with a 10-meter meteorological tower equipped with sensors to continuously measure wind speed and direction. One meteorological tower shall be located in the predominant downwind direction from the center of the facility and another located in the predominant upwind direction from the center of the facility. The meteorological data shall be recorded & submitted to the Department as 10-minute averages.

Each monitoring station shall be equipped with a continuous total non-methane organic carbon (TNMOC) analyzer capable of detecting VOC concentrations of 0.1 ppm or less for each 10-minute period. This analyzer shall be operated year round with a data completeness of at least 85%. All data shall be recorded and submitted to the Department (Excel format) as 10-minute averages. The analyzer shall be integrated with a summa canister sampler capable of automatically collecting a 20-minute air sample (trigger sample) when the analyzer exceeds a predetermined concentration threshold. This threshold should be adjusted to insure a minimum of 5 samples are triggered each month when the meteorological data indicate the sample was impacted by emissions from the facility. Each canister sample shall be analyzed via gas chromatography/flame ionization detection for a compound target list approved by the Department. This target list shall include all ozone precursor VOCs emitted in significant amounts and any of the highly reactive volatile organic compounds emitted by the facility. The highly reactive VOCs include ethylene, propylene, butanes, 1,3-butadiene, toluene and xylenes. The analytical & quality assurance procedures shall be consistent with the ozone precursor analysis method outlined in EPA 600-R-98/161. The minimum detection limits for the analysis as calculated by the method set forth in 40 CFR Part 36(b) shall be no greater than 10 ppbC for each of the target analytes. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

In addition, each facility shall install a summa canister sampler capable of collecting a 24-hour integrated sample once every six days. The sampler may be located at one of the air monitoring stations or as an alternative may be installed off-site in a location determined to be in the predominant down-wind direction. This sample shall be analyzed by EPA method TO-14 or TO-15 to determine if any of the Louisiana ambient air quality standards for VOCs (see LAC 33:III.5112, Table 51.2) are being exceeded. The target analytes for these samples shall include at least the following compounds: 1,3-butadiene, vinyl chloride, 1,2-dichloroethane, benzene, toluene, chloroform, and methylene chloride. The minimum detection limits for each of the target analytes as calculated by the method set forth in 40 CFR Part 36(b) shall be the lesser of 0.5 ppbv or the applicable Louisiana annual average ambient air standard. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.



State of Louisiana  
Department of Environmental Quality



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

October 6, 2004

MIKE D. McDANIEL, Ph.D.  
SECRETARY

CERTIFIED MAIL (7002 2030 0002 8914 8518)  
RETURN RECEIPT REQUESTED

**BASF CORPORATION**  
c/o C T Corporation System  
Agent of Service  
8550 United Plaza Boulevard  
Baton Rouge, Louisiana 70809

**RE: ADMINISTRATIVE ORDER**  
**ENFORCEMENT TRACKING NO. AE-AO-04-0301**  
**AGENCY INTEREST NO. 2049**

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **ADMINISTRATIVE ORDER** is hereby served on **BASF CORPORATION (RESPONDENT)**.

Any questions concerning this action should be directed to Sonya Eastern at (225) 219-3937 or Jane LaCour at (225) 219-3716.

Sincerely,

Peggy M. Hatch  
Administrator  
Enforcement Division

PMH/JL/efm  
Alt ID No. 0180-00013  
Attachment

c: BASF Corporation  
c/o Phil C. Greeson, General Manager  
8404 River Road  
Geismar, Louisiana 70734



OFFICE OF ENVIRONMENTAL COMPLIANCE • P.O. BOX 4312 • BATON ROUGE, LOUISIANA 70821-4312

AN EQUAL OPPORTUNITY EMPLOYER



**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE**

**IN THE MATTER**

**BASF CORPORATION  
ASCENSION PARISH  
ALT ID NO. 0180-00013**

**PROCEEDINGS UNDER THE LOUISIANA  
ENVIRONMENTAL QUALITY ACT,  
La. R.S. 30:2001, ET SEQ.**

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**ENFORCEMENT TRACKING NO.**

**AE-AO-04-0301**

**AGENCY INTEREST NO.**

**2049**

**ADMINISTRATIVE ORDER**

The following **ADMINISTRATIVE ORDER** is issued to **BASF CORPORATION** (**RESPONDENT**) by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2011(D)(6) and (D)(14).

**FINDINGS OF FACT**

**I.**

The Respondent owns and/or operates a chemical manufacturing complex located at 8404 River Road in Geismar, Ascension Parish, Louisiana, which is within the 5-parish Baton Rouge Ozone Nonattainment area. The most recent emission inventory submitted by the Respondent for this facility indicates that highly reactive volatile organic compounds (HRVOC) are emitted from

the facility. For purposes of this **ADMINISTRATIVE ORDER**, HRVOC shall consist of 1,3-butadiene, butenes, ethylene, propylene, toluene and xylenes. The facility currently operates under multiple air permits.

## II.

The Baton Rouge area is in violation of both the 1-hour and 8-hour National Ambient Air Quality Standard. Ozone concentrations above these standards are a public health concern. The Baton Rouge area was classified as a "serious" ozone nonattainment area for the 1-hour ozone standard under the Clean Air Act Amendments of 1990 and given until November 1999 to achieve attainment of the standard. Despite good progress, the area failed to achieve attainment of the standard by the 1999 deadline. In June 2003, the 5-parish Baton Rouge Ozone Nonattainment area was reclassified to the next higher or "severe" classification by operation of law and given a new attainment date of November 2005. The reclassification to "severe" status brought with it many new requirements such as reformulated gasoline, regulation of smaller businesses, increased emission offsets for new sources or modification of existing sources, and possible Clean Air Act Section 185 penalty fees if the area fails to attain the standard by the November 2005 deadline. These measures will have a serious economic impact on Louisiana.

## III.

In June of 2004, EPA began implementing a new 8-hour ozone standard, under which the 5-parish Baton Rouge area was designated nonattainment and assigned a "marginal" classification with an attainment date of June 2007.



#### IV.

Ozone modeling has indicated that a nitrogen oxides ( $\text{NO}_x$ ) control strategy is needed to reduce regional ozone levels in the Baton Rouge area, and measures are in place that will result in substantial reductions in local  $\text{NO}_x$  emissions. It appears that volatile organic compounds (VOC) and  $\text{NO}_x$  reductions that have been made are adequate to prevent exceedances of the standard under most weather conditions except when HRVOC are present. The Department's research over the past three years has shown that releases of HRVOC have been associated with recent peaking episodes of elevated ozone that have led to exceedances of the 1-hour and 8-hour standards. Over this period of time, local industries handling the HRVOC have been asked to look at their operations and devise means to reduce the releases of these compounds. However, extensive sampling this summer shows releases of HRVOC continue to be a problem. The Department has monitored over 100 releases of HRVOC between January and August of this year.

#### V.

In addition to the unhealthful air, the ozone exceedances experienced this summer now make it impossible for the Baton Rouge area to achieve attainment of the 1-hour ozone standard by the November 2005 deadline. This failure to achieve attainment could lead to the implementation of Section 185 annual penalty fees computed to be about \$100 million per year for industries in the 5-parish area.

VI.

Elevated ozone episodes this summer will also make it exceedingly difficult for the Baton Rouge area to achieve attainment of the 8-hour ozone standard by June of 2007 as required. Failure to achieve attainment by the 2007 deadline will likely result in a reclassification of the area upward from a "marginal" to a "moderate" classification and will likely bring additional control measures for the area.

VII.

The continuing episodes of spiking ozone levels lead to periods of unhealthy air quality, and continuing burdensome requirements on industry, local businesses, local government, and the general public. Thus the Department requires the information outlined below to develop ozone control measures to protect the health of the citizens of Louisiana.

**ADMINISTRATIVE ORDER**

Based on the foregoing, Respondent is hereby ordered:

I.

To submit to the Department, for approval, a plan for a fenceline monitoring program. The Respondent shall submit this plan to the Department within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER** and implement the fenceline monitoring program by no later than March 1, 2005. At a minimum, the fenceline monitoring program shall include the requirements listed in Attachment 1.

II.

To the extent required by law, further proceedings relating to this **ADMINISTRATIVE ORDER** will be governed by the Administrative Procedure Act, La. R.S. 49:950, et seq.


III.

For each action or event described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

IV.

This **ADMINISTRATIVE ORDER** is effective upon receipt.

Baton Rouge, Louisiana, this 6<sup>th</sup> day of October, 2004.

  
\_\_\_\_\_  
Mike D. McDaniel, Ph.D.  
Secretary

Copies of correspondence should be sent to:

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312  
Attention: Jane LaCour

## Attachment 1

### Fence line Air Monitoring Requirements

Each facility shall be required to install a minimum of four air-monitoring stations. These stations should be located on or near the facility property boundary with at least one station positioned on each of the four main compass points (north, east, south, west) from the center of the facility. At least two of the stations shall be supplemented with a 10-meter meteorological tower equipped with sensors to continuously measure wind speed and direction. One meteorological tower shall be located in the predominant downwind direction from the center of the facility and another located in the predominant upwind direction from the center of the facility. The meteorological data shall be recorded & submitted to the Department as 10-minute averages.

Each monitoring station shall be equipped with a continuous total non-methane organic carbon (TNMOC) analyzer capable of detecting VOC concentrations of 0.1 ppm or less for each 10-minute period. This analyzer shall be operated year round with a data completeness of at least 85%. All data shall be recorded and submitted to the Department (Excel format) as 10-minute averages. The analyzer shall be integrated with a summa canister sampler capable of automatically collecting a 20-minute air sample (trigger sample) when the analyzer exceeds a predetermined concentration threshold. This threshold should be adjusted to insure a minimum of 5 samples are triggered each month when the meteorological data indicate the sample was impacted by emissions from the facility. Each canister sample shall be analyzed via gas chromatography/flame ionization detection for a compound target list approved by the Department. This target list shall include all ozone precursor VOCs emitted in significant amounts and any of the highly reactive volatile organic compounds emitted by the facility. The highly reactive VOCs include ethylene, propylene, butanes, 1,3-butadiene, toluene and xylenes. The analytical & quality assurance procedures shall be consistent with the ozone precursor analysis method outlined in EPA 600-R-98/161. The minimum detection limits for the analysis as calculated by the method set forth in 40 CFR Part 36(b) shall be no greater than 10 ppbC for each of the target analytes. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

In addition, each facility shall install a summa canister sampler capable of collecting a 24-hour integrated sample once every six days. The sampler may be located at one of the air monitoring stations or as an alternative may be installed off-site in a location determined to be in the predominant down-wind direction. This sample shall be analyzed by EPA method TO-14 or TO-15 to determine if any of the Louisiana ambient air quality standards for VOCs (see LAC 33:III.5112, Table 51.2) are being exceeded. The target analytes for these samples shall include at least the following compounds: 1,3-butadiene, vinyl chloride, 1,2-dichloroethane, benzene, toluene, chloroform, and methylene chloride. The minimum detection limits for each of the target analytes as calculated by the method set forth in 40 CFR Part 36(b) shall be the lesser of 0.5 ppbv or the applicable Louisiana annual average ambient air standard. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.



**State of Louisiana**  
**Department of Environmental Quality**



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

October 6, 2004

MIKE D. McDANIEL, Ph.D.  
SECRETARY

CERTIFIED MAIL (7002 0460 0002 6054 2826)  
RETURN RECEIPT REQUESTED

**DSM COPOLYMER, INC.**  
c/o C T Corporation System  
Agent of Service  
8550 United Plaza Boulevard  
Baton Rouge, Louisiana 70809

**RE: ADMINISTRATIVE ORDER**  
**ENFORCEMENT TRACKING NO. AE-AO-04-0300**  
**AGENCY INTEREST NO. 2519**

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **ADMINISTRATIVE ORDER** is hereby served on **DSM COPOLYMER, INC. (RESPONDENT)**.

Any questions concerning this action should be directed to Sonya Eastern at (225) 219-3937 or Jane Lacour at (225) 219-3716.

Sincerely,

Peggy M. Hatch  
Administrator  
Enforcement Division

PMH/BDM/bdm  
Alt ID No. 3120-00004  
Attachment

c: Brian Eastep, Environmental Engineer  
DSM Copolymer, Inc. Addis Facility  
9263 Highway 1 South  
Addis, Louisiana 70710

**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE**

**IN THE MATTER**

**DSM COPOLYMER, INC.  
WEST BATON ROUGE PARISH  
ALT ID NO. 3120-00004**

**ENFORCEMENT TRACKING NO.**

**AE-AO-04-0300**

**AGENCY INTEREST NO.**

**PROCEEDINGS UNDER THE LOUISIANA  
ENVIRONMENTAL QUALITY ACT,  
La. R.S. 30:2001, ET SEQ.**

**2519**

**ADMINISTRATIVE ORDER**

The following **ADMINISTRATIVE ORDER** is issued to **DSM COPOLYMER, INC.** (**RESPONDENT**) by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2011(D)(6) and (D)(14).

**FINDINGS OF FACT**

**I.**

The Respondent owns and/or operates the Addis Facility, a synthetic rubber manufacturing plant located at 9263 Louisiana Highway 1 in Addis, West Baton Rouge Parish, Louisiana, which is within the 5-parish Baton Rouge Ozone Nonattainment area. The most recent emission inventory

submitted by the Respondent for this facility indicates that highly reactive volatile organic compounds (HRVOC) are emitted from the facility. For purposes of this **ADMINISTRATIVE ORDER**, HRVOC shall consist of 1,3-butadiene, butenes, ethylene, propylene, toluene and xylenes. The facility operates under Title V Permit No. 3120-00004-V0 issued on March 5, 2004.

## II.

The Baton Rouge area is in violation of both the 1-hour and 8-hour National Ambient Air Quality Standard. Ozone concentrations above these standards are a public health concern. The Baton Rouge area was classified as a "serious" ozone nonattainment area for the 1-hour ozone standard under the Clean Air Act Amendments of 1990 and given until November 1999 to achieve attainment of the standard. Despite good progress, the area failed to achieve attainment of the standard by the 1999 deadline. In June 2003, the 5-parish Baton Rouge Ozone Nonattainment area was reclassified to the next higher or "severe" classification by operation of law and given a new attainment date of November 2005. The reclassification to "severe" status brought with it many new requirements such as reformulated gasoline, regulation of smaller businesses, increased emission offsets for new sources or modification of existing sources, and possible Clean Air Act Section 185 penalty fees if the area fails to attain the standard by the November 2005 deadline. These measures will have a serious economic impact on Louisiana.

## III.

In June of 2004, EPA began implementing a new 8-hour ozone standard, under which the 5-parish Baton Rouge area was designated nonattainment and assigned a "marginal" classification with an attainment date of June 2007.



#### IV.

Ozone modeling has indicated that a nitrogen oxides (NO<sub>x</sub>) control strategy is needed to reduce regional ozone levels in the Baton Rouge area, and measures are in place that will result in substantial reductions in local NO<sub>x</sub> emissions. It appears that volatile organic compounds (VOC) and NO<sub>x</sub> reductions that have been made are adequate to prevent exceedances of the standard under most weather conditions except when HRVOC are present. The Department's research over the past three years has shown that releases of HRVOC have been associated with recent peaking episodes of elevated ozone that have led to exceedances of the 1-hour and 8-hour standards. Over this period of time, local industries handling the HRVOC have been asked to look at their operations and devise means to reduce the releases of these compounds. However, extensive sampling this summer shows releases of HRVOC continue to be a problem. The Department has monitored over 100 releases of HRVOC between January and August of this year.

#### V.

In addition to the unhealthy air, the ozone exceedances experienced this summer now make it impossible for the Baton Rouge area to achieve attainment of the 1-hour ozone standard by the November 2005 deadline. This failure to achieve attainment could lead to the implementation of Section 185 annual penalty fees computed to be about \$100 million per year for industries in the 5-parish area.

#### VI.

Elevated ozone episodes this summer will also make it exceedingly difficult for the Baton Rouge area to achieve attainment of the 8-hour ozone standard by June of 2007 as required. Failure to achieve attainment by the 2007 deadline will likely result in a reclassification of the area upward

from a "marginal" to a "moderate" classification and will likely bring additional control measures for the area.

## VII.

The continuing episodes of spiking ozone levels lead to periods of unhealthy air quality, and continuing burdensome requirements on industry, local businesses, local government, and the general public. Thus the Department requires the information outlined below to develop ozone control measures to protect the health of the citizens of Louisiana.

### **ADMINISTRATIVE ORDER**

Based on the foregoing, Respondent is **hereby ordered**:

#### I.

To submit to the Department, for approval, a plan for a fenceline monitoring program. The Respondent shall submit this plan to the Department within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER** and implement the fenceline monitoring program by no later than March 1, 2005. At a minimum, the fenceline monitoring program shall include the requirements listed in Attachment 1.

#### II.

To the extent required by law, further proceedings relating to this **ADMINISTRATIVE ORDER** will be governed by the Administrative Procedure Act, La. R.S. 49:950, et seq.

#### III.

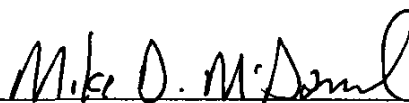
For each action or event described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by

law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

IV.

This **ADMINISTRATIVE ORDER** is effective upon receipt.

Baton Rouge, Louisiana, this 6<sup>th</sup> day of October, 2004.

  
\_\_\_\_\_  
Mike D. McDaniel, Ph.D.  
Secretary

Copies of correspondence should be sent to:

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312  
Attention: Jane Lacour

## Attachment 1

### Fence line Air Monitoring Requirements

Each facility shall be required to install a minimum of four air-monitoring stations. These stations should be located on or near the facility property boundary with at least one station positioned on each of the four main compass points (north, east, south, west) from the center of the facility. At least two of the stations shall be supplemented with a 10-meter meteorological tower equipped with sensors to continuously measure wind speed and direction. One meteorological tower shall be located in the predominant downwind direction from the center of the facility and another located in the predominant upwind direction from the center of the facility. The meteorological data shall be recorded & submitted to the Department as 10-minute averages.

Each monitoring station shall be equipped with a continuous total non-methane organic carbon (TNMOC) analyzer capable of detecting VOC concentrations of 0.1 ppm or less for each 10-minute period. This analyzer shall be operated year round with a data completeness of at least 85%. All data shall be recorded and submitted to the Department (Excel format) as 10-minute averages. The analyzer shall be integrated with a summa canister sampler capable of automatically collecting a 20-minute air sample (trigger sample) when the analyzer exceeds a predetermined concentration threshold. This threshold should be adjusted to insure a minimum of 5 samples are triggered each month when the meteorological data indicate the sample was impacted by emissions from the facility. Each canister sample shall be analyzed via gas chromatography/flame ionization detection for a compound target list approved by the Department. This target list shall include all ozone precursor VOCs emitted in significant amounts and any of the highly reactive volatile organic compounds emitted by the facility. The highly reactive VOCs include ethylene, propylene, butanes, 1,3-butadiene, toluene and xylenes. The analytical & quality assurance procedures shall be consistent with the ozone precursor analysis method outlined in EPA 600-R-98/161. The minimum detection limits for the analysis as calculated by the method set forth in 40 CFR Part 36(b) shall be no greater than 10 ppbC for each of the target analytes. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

In addition, each facility shall install a summa canister sampler capable of collecting a 24-hour integrated sample once every six days. The sampler may be located at one of the air monitoring stations or as an alternative may be installed off-site in a location determined to be in the predominant down-wind direction. This sample shall be analyzed by EPA method TO-14 or TO-15 to determine if any of the Louisiana ambient air quality standards for VOCs (see LAC 33:III.5112, Table 51.2) are being exceeded. The target analytes for these samples shall include at least the following compounds: 1,3-butadiene, vinyl chloride, 1,2-dichloroethane, benzene, toluene, chloroform, and methylene chloride. The minimum detection limits for each of the target analytes as calculated by the method set forth in 40 CFR Part 36(b) shall be the lesser of 0.5 ppbv or the applicable Louisiana annual average ambient air standard. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.



**State of Louisiana**  
**Department of Environmental Quality**



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

October 6, 2004

MIKE D. McDANIEL, Ph.D.  
SECRETARY

CERTIFIED MAIL (7002 2030 0002 8907 5661)  
RETURN RECEIPT REQUESTED

**VULCAN MATERIALS COMPANY**  
c/o The Prentice-Hall Corporation System, Inc.  
Agent of Service  
701 South Peters Street, Second Floor  
New Orleans, Louisiana 70130

**RE: ADMINISTRATIVE ORDER**  
**ENFORCEMENT TRACKING NO. AE-AO-04-0299**  
**AGENCY INTEREST NO. 3400**

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **ADMINISTRATIVE ORDER** is hereby served on **VULCAN MATERIALS COMPANY (RESPONDENT)**.

Any questions concerning this action should be directed to Sonya Eastern at (225) 219-3937 or Jane LaCour at (225) 219-3716.

Sincerely,

Peggy M. Hatch  
Administrator  
Enforcement Division

PMH/RO/ro  
Alt ID No. 0180-00011  
Attachment

c: Ms. Amy Sierra  
Environmental Group Supervisor  
Vulcan Chemicals  
Post Office Box 227  
Geismar, Louisiana 70734

**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE**

**IN THE MATTER**

**VULCAN MATERIALS COMPANY  
ASCENSION PARISH  
ALT ID NO. 0180-00011**

**ENFORCEMENT TRACKING NO.**

**AE-AO-04-0299**

**AGENCY INTEREST NO.**

**PROCEEDINGS UNDER THE LOUISIANA  
ENVIRONMENTAL QUALITY ACT,  
La. R.S. 30:2001, ET SEQ.**

**3400**

**ADMINISTRATIVE ORDER**

The following **ADMINISTRATIVE ORDER** is issued to **VULCAN MATERIALS COMPANY (RESPONDENT)** by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2011(D)(6) and (D)(14).

**FINDINGS OF FACT**

**I.**

The Respondent owns and/or operates an industrial organic and inorganic chemical manufacturing facility known as Vulcan Chemical's Geismar Facility located at or near 8318 Ashland Road in Geismar, Ascension Parish, Louisiana, which is within the 5-parish Baton Rouge Ozone Nonattainment area. The most recent emission inventory submitted by the Respondent for

this facility indicates that highly reactive volatile organic compounds (HRVOC) are emitted from the facility. For purposes of this **ADMINISTRATIVE ORDER**, HRVOC shall consist of 1,3-butadiene, butenes, ethylene, propylene, toluene and xylenes. The facility operates under multiple air permits.

## II.

The Baton Rouge area is in violation of both the 1-hour and 8-hour National Ambient Air Quality Standard. Ozone concentrations above these standards are a public health concern. The Baton Rouge area was classified as a "serious" ozone nonattainment area for the 1-hour ozone standard under the Clean Air Act Amendments of 1990 and given until November 1999 to achieve attainment of the standard. Despite good progress, the area failed to achieve attainment of the standard by the 1999 deadline. In June 2003, the 5-parish Baton Rouge Ozone Nonattainment area was reclassified to the next higher or "severe" classification by operation of law and given a new attainment date of November 2005. The reclassification to "severe" status brought with it many new requirements such as reformulated gasoline, regulation of smaller businesses, increased emission offsets for new sources or modification of existing sources, and possible Clean Air Act Section 185 penalty fees if the area fails to attain the standard by the November 2005 deadline. These measures will have a serious economic impact on Louisiana.

## III.

In June of 2004, EPA began implementing a new 8-hour ozone standard, under which the 5-parish Baton Rouge area was designated nonattainment and assigned a "marginal" classification with an attainment date of June 2007.

#### IV.

Ozone modeling has indicated that a nitrogen oxides (NO<sub>x</sub>) control strategy is needed to reduce regional ozone levels in the Baton Rouge area, and measures are in place that will result in substantial reductions in local NO<sub>x</sub> emissions. It appears that volatile organic compounds (VOC) and NO<sub>x</sub> reductions that have been made are adequate to prevent exceedances of the standard under most weather conditions except when HRVOC are present. The Department's research over the past three years has shown that releases of HRVOC have been associated with recent peaking episodes of elevated ozone that have led to exceedances of the 1-hour and 8-hour standards. Over this period of time, local industries handling the HRVOC have been asked to look at their operations and devise means to reduce the releases of these compounds. However, extensive sampling this summer shows releases of HRVOC continue to be a problem. The Department has monitored over 100 releases of HRVOC between January and August of this year.

#### V.

In addition to the unhealthful air, the ozone exceedances experienced this summer now make it impossible for the Baton Rouge area to achieve attainment of the 1-hour ozone standard by the November 2005 deadline. This failure to achieve attainment could lead to the implementation of Section 185 annual penalty fees computed to be about \$100 million per year for industries in the 5-parish area.



VI.

Elevated ozone episodes this summer will also make it exceedingly difficult for the Baton Rouge area to achieve attainment of the 8-hour ozone standard by June of 2007 as required. Failure to achieve attainment by the 2007 deadline will likely result in a reclassification of the area upward from a "marginal" to a "moderate" classification and will likely bring additional control measures for the area.

VII.

The continuing episodes of spiking ozone levels lead to periods of unhealthy air quality, and continuing burdensome requirements on industry, local businesses, local government, and the general public. Thus the Department requires the information outlined below to develop ozone control measures to protect the health of the citizens of Louisiana.

**ADMINISTRATIVE ORDER**

Based on the foregoing, Respondent is hereby ordered:

I.

To submit to the Department, for approval, a plan for a fenceline monitoring program. The Respondent shall submit this plan to the Department within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER** and implement the fenceline monitoring program by no later than March 1, 2005. At a minimum, the fenceline monitoring program shall include the requirements listed in Attachment 1.

II.

To the extent required by law, further proceedings relating to this **ADMINISTRATIVE ORDER** will be governed by the Administrative Procedure Act, La. R.S. 49:950, et seq.


III.

For each action or event described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

IV.

This **ADMINISTRATIVE ORDER** is effective upon receipt.

Baton Rouge, Louisiana, this 6<sup>th</sup> day of October, 2004.

  
\_\_\_\_\_  
Mike D. McDaniel, Ph.D.  
Secretary

Copies of correspondence should be sent to:

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312  
Attention: Jane LaCour

# Attachment 1

## Fence line Air Monitoring Requirements

Each facility shall be required to install a minimum of four air-monitoring stations. These stations should be located on or near the facility property boundary with at least one station positioned on each of the four main compass points (north, east, south, west) from the center of the facility. At least two of the stations shall be supplemented with a 10-meter meteorological tower equipped with sensors to continuously measure wind speed and direction. One meteorological tower shall be located in the predominant downwind direction from the center of the facility and another located in the predominant upwind direction from the center of the facility. The meteorological data shall be recorded & submitted to the Department as 10-minute averages.

Each monitoring station shall be equipped with a continuous total non-methane organic carbon (TNMOC) analyzer capable of detecting VOC concentrations of 0.1 ppm or less for each 10-minute period. This analyzer shall be operated year round with a data completeness of at least 85%. All data shall be recorded and submitted to the Department (Excel format) as 10-minute averages. The analyzer shall be integrated with a summa canister sampler capable of automatically collecting a 20-minute air sample (trigger sample) when the analyzer exceeds a predetermined concentration threshold. This threshold should be adjusted to insure a minimum of 5 samples are triggered each month when the meteorological data indicate the sample was impacted by emissions from the facility. Each canister sample shall be analyzed via gas chromatography/flame ionization detection for a compound target list approved by the Department. This target list shall include all ozone precursor VOCs emitted in significant amounts and any of the highly reactive volatile organic compounds emitted by the facility. The highly reactive VOCs include ethylene, propylene, butanes, 1,3-butadiene, toluene and xylenes. The analytical & quality assurance procedures shall be consistent with the ozone precursor analysis method outlined in EPA 600-R-98/161. The minimum detection limits for the analysis as calculated by the method set forth in 40 CFR Part 36(b) shall be no greater than 10 ppbC for each of the target analytes. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

In addition, each facility shall install a summa canister sampler capable of collecting a 24-hour integrated sample once every six days. The sampler may be located at one of the air monitoring stations or as an alternative may be installed off-site in a location determined to be in the predominant down-wind direction. This sample shall be analyzed by EPA method TO-14 or TO-15 to determine if any of the Louisiana ambient air quality standards for VOCs (see LAC 33:III.5112, Table 51.2) are being exceeded. The target analytes for these samples shall include at least the following compounds: 1,3-butadiene, vinyl chloride, 1,2-dichloroethane, benzene, toluene, chloroform, and methylene chloride. The minimum detection limits for each of the target analytes as calculated by the method set forth in 40 CFR Part 36(b) shall be the lesser of 0.5 ppbv or the applicable Louisiana annual average ambient air standard. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.



**State of Louisiana**  
**Department of Environmental Quality**



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

October 6, 2004

MIKE D. McDANIEL, Ph.D.  
SECRETARY

CERTIFIED MAIL (7002 0460 0002 6054 7920)  
RETURN RECEIPT REQUESTED

**WILLIAMS OLEFINS, L.L.C.**  
c/o C T Corporation System  
Agent of Service  
8550 United Plaza Blvd.  
Baton Rouge, LA 70809

**RE: ADMINISTRATIVE ORDER**  
**ENFORCEMENT TRACKING NO. AE-AO-04-0297**  
**AGENCY INTEREST NO. 5565**

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, *et seq.*), the attached **ADMINISTRATIVE ORDER** is hereby served on **WILLIAMS OLEFINS, L.L.C. (RESPONDENT)**.

Any questions concerning this action should be directed to Sonya Eastern at (225) 219-3937 or Jane LaCour at (225) 219-3716.

Sincerely,

Peggy M. Hatch  
Administrator  
Enforcement Division

PMH/JCM/jl  
Alt ID No. 0180-00029  
Attachment

c: Williams Olefins, L.L.C.  
c/o Doug Badon, Environmental Superintendant  
5205 Highway 3115  
Geismar, LA 70734



OFFICE OF ENVIRONMENTAL COMPLIANCE • P.O. BOX 4312 • BATON ROUGE, LOUISIANA 70821-4312

AN EQUAL OPPORTUNITY EMPLOYER



**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE**

**IN THE MATTER**

**WILLIAMS OLEFINS, L.L.C.  
ASCENSION PARISH  
ALT ID NO. 0180-00029**

**PROCEEDINGS UNDER THE LOUISIANA  
ENVIRONMENTAL QUALITY ACT,  
La. R.S. 30:2001, ET SEQ.**

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**ENFORCEMENT TRACKING NO.**

**AE-AO-04-0297**

**AGENCY INTEREST NO.**

**5565**

**ADMINISTRATIVE ORDER**

The following **ADMINISTRATIVE ORDER** is issued to **WILLIAMS OLEFINS, L.L.C.** (**RESPONDENT**) by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2011(D)(6) and (D)(14).

**FINDINGS OF FACT**

**I.**

The Respondent owns and/or operates an ethylene production facility and debutanized aromatic concentrate (DAC) storage tank located at or near Geismar in Ascension Parish, Louisiana, which is within the 5-parish Baton Rouge Ozone Nonattainment area. The most recent emission inventory submitted by the Respondent for this facility indicates that highly reactive volatile organic

compounds (HRVOC) are emitted from the facility. For purposes of this **ADMINISTRATIVE ORDER**, HRVOC shall consist of 1,3-butadiene, butenes, ethylene, propylene, toluene and xylenes. The ethylene production facility operates under Title V Permit No. 0180-00029-V4, issued on March 25, 2003, and the DAC operates under Title V Permit No. 2636-V0, issued on September 23, 1999.

## II.

The Baton Rouge area is in violation of both the 1-hour and 8-hour National Ambient Air Quality Standard. Ozone concentrations above these standards are a public health concern. The Baton Rouge area was classified as a "serious" ozone nonattainment area for the 1-hour ozone standard under the Clean Air Act Amendments of 1990 and given until November 1999 to achieve attainment of the standard. Despite good progress, the area failed to achieve attainment of the standard by the 1999 deadline. In June 2003, the 5-parish Baton Rouge Ozone Nonattainment area was reclassified to the next higher or "severe" classification by operation of law and given a new attainment date of November 2005. The reclassification to "severe" status brought with it many new requirements such as reformulated gasoline, regulation of smaller businesses, increased emission offsets for new sources or modification of existing sources, and possible Clean Air Act Section 185 penalty fees if the area fails to attain the standard by the November 2005 deadline. These measures will have a serious economic impact on Louisiana.

## III.

In June of 2004, EPA began implementing a new 8-hour ozone standard, under which the 5-parish Baton Rouge area was designated nonattainment and assigned a "marginal" classification with an attainment date of June 2007.

#### IV.

Ozone modeling has indicated that a nitrogen oxides (NO<sub>x</sub>) control strategy is needed to reduce regional ozone levels in the Baton Rouge area, and measures are in place that will result in substantial reductions in local NO<sub>x</sub> emissions. It appears that volatile organic compounds (VOC) and NO<sub>x</sub> reductions that have been made are adequate to prevent exceedances of the standard under most weather conditions except when HRVOC are present. The Department's research over the past three years has shown that releases of HRVOC have been associated with recent peaking episodes of elevated ozone that have led to exceedances of the 1-hour and 8-hour standards. Over this period of time, local industries handling the HRVOC have been asked to look at their operations and devise means to reduce the releases of these compounds. However, extensive sampling this summer shows releases of HRVOC continue to be a problem. The Department has monitored over 100 releases of HRVOC between January and August of this year.

#### V.

In addition to the unhealthful air, the ozone exceedances experienced this summer now make it impossible for the Baton Rouge area to achieve attainment of the 1-hour ozone standard by the November 2005 deadline. This failure to achieve attainment could lead to the implementation of Section 185 annual penalty fees computed to be about \$100 million per year for industries in the 5-parish area.

#### VI.

Elevated ozone episodes this summer will also make it exceedingly difficult for the Baton Rouge area to achieve attainment of the 8-hour ozone standard by June of 2007 as required. Failure to achieve attainment by the 2007 deadline will likely result in a reclassification of the area upward

from a "marginal" to a "moderate" classification and will likely bring additional control measures for the area.

## VII.

The continuing episodes of spiking ozone levels lead to periods of unhealthy air quality, and continuing burdensome requirements on industry, local businesses, local government, and the general public. Thus the Department requires the information outlined below to develop ozone control measures to protect the health of the citizens of Louisiana.

### **ADMINISTRATIVE ORDER**

Based on the foregoing, Respondent is hereby ordered:

#### I.

To submit to the Department, for approval, a plan for a fenceline monitoring program. The Respondent shall submit this plan to the Department within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER** and implement the fenceline monitoring program by no later than March 1, 2005. At a minimum, the fenceline monitoring program shall include the requirements listed in Attachment 1.

#### II.

To the extent required by law, further proceedings relating to this **ADMINISTRATIVE ORDER** will be governed by the Administrative Procedure Act, La. R.S. 49:950, et seq.



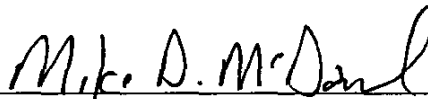
III.

For each action or event described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

IV.

This **ADMINISTRATIVE ORDER** is effective upon receipt.

Baton Rouge, Louisiana, this 6<sup>th</sup> day of October, 2004.



Mike D. McDaniel, Ph.D.  
Secretary

Copies of correspondence should be sent to:

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312  
Attention: Jane LaCour

## Attachment 1

### Fence line Air Monitoring Requirements

Each facility shall be required to install a minimum of four air-monitoring stations. These stations should be located on or near the facility property boundary with at least one station positioned on each of the four main compass points (north, east, south, west) from the center of the facility. At least two of the stations shall be supplemented with a 10-meter meteorological tower equipped with sensors to continuously measure wind speed and direction. One meteorological tower shall be located in the predominant downwind direction from the center of the facility and another located in the predominant upwind direction from the center of the facility. The meteorological data shall be recorded & submitted to the Department as 10-minute averages.

Each monitoring station shall be equipped with a continuous total non-methane organic carbon (TNMOC) analyzer capable of detecting VOC concentrations of 0.1 ppm or less for each 10-minute period. This analyzer shall be operated year round with a data completeness of at least 85%. All data shall be recorded and submitted to the Department (Excel format) as 10-minute averages. The analyzer shall be integrated with a summa canister sampler capable of automatically collecting a 20-minute air sample (trigger sample) when the analyzer exceeds a predetermined concentration threshold. This threshold should be adjusted to insure a minimum of 5 samples are triggered each month when the meteorological data indicate the sample was impacted by emissions from the facility. Each canister sample shall be analyzed via gas chromatography/flame ionization detection for a compound target list approved by the Department. This target list shall include all ozone precursor VOCs emitted in significant amounts and any of the highly reactive volatile organic compounds emitted by the facility. The highly reactive VOCs include ethylene, propylene, butanes, 1,3-butadiene, toluene and xylenes. The analytical & quality assurance procedures shall be consistent with the ozone precursor analysis method outlined in EPA 600-R-98/161. The minimum detection limits for the analysis as calculated by the method set forth in 40 CFR Part 36(b) shall be no greater than 10 ppbC for each of the target analytes. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

In addition, each facility shall install a summa canister sampler capable of collecting a 24-hour integrated sample once every six days. The sampler may be located at one of the air monitoring stations or as an alternative may be installed off-site in a location determined to be in the predominant down-wind direction. This sample shall be analyzed by EPA method TO-14 or TO-15 to determine if any of the Louisiana ambient air quality standards for VOCs (see LAC 33:III.5112, Table 51.2) are being exceeded. The target analytes for these samples shall include at least the following compounds: 1,3-butadiene, vinyl chloride, 1,2-dichloroethane, benzene, toluene, chloroform, and methylene chloride. The minimum detection limits for each of the target analytes as calculated by the method set forth in 40 CFR Part 36(b) shall be the lesser of 0.5 ppbv or the applicable Louisiana annual average ambient air standard. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.



State of Louisiana  
Department of Environmental Quality



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

October 6, 2004

MIKE D. McDANIEL, Ph.D.  
SECRETARY

CERTIFIED MAIL (7002 2030 0002 8914 0581)  
RETURN RECEIPT REQUESTED

**SHELL CHEMICAL LP**  
c/o Corporation Service Company  
Agent of Service  
320 Somerulos Street  
Baton Rouge, Louisiana 70802-6129

**RE: ADMINISTRATIVE ORDER  
ENFORCEMENT TRACKING NO. AE-AO-04-0296  
AGENCY INTEREST NO. 1136**

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **ADMINISTRATIVE ORDER** is hereby served on **SHELL CHEMICAL LP (RESPONDENT)**.

Any questions concerning this action should be directed to Sonya Eastern at (225)219-3937 or Jane LaCour at (225)219-3716.

Sincerely,

Peggy M. Hatch  
Administrator  
Enforcement Division

PMH/ALF/alf  
Alt ID No. 0180-00010  
Attachment

c: Shell Chemical LP  
Steve Rathweg, Plant Manager  
Post Office Box 500  
Geismar, Louisiana 70734-0500



OFFICE OF ENVIRONMENTAL COMPLIANCE • P.O. BOX 4312 • BATON ROUGE, LOUISIANA 70821-4312

AN EQUAL OPPORTUNITY EMPLOYER



**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE**

**IN THE MATTER**

**SHELL CHEMICAL LP  
ASCENSION PARISH  
ALT ID NO. 0180-00010**

**PROCEEDINGS UNDER THE LOUISIANA  
ENVIRONMENTAL QUALITY ACT,  
La. R.S. 30:2001, ET SEQ.**

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**ENFORCEMENT TRACKING NO.**

**AE-AO-04-0296**

**AGENCY INTEREST NO.**

**1136**

**ADMINISTRATIVE ORDER**

The following **ADMINISTRATIVE ORDER** is issued to **SHELL CHEMICAL LP (RESPONDENT)** by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2011(D)(6) and (D)(14).

**FINDINGS OF FACT**

**I.**

The Respondent owns and/or operates the Geismar Plant located at 7594 Louisiana Highway 75 in Geismar, Ascension Parish, Louisiana, which is within the 5-parish Baton Rouge Ozone Nonattainment area. The most recent emission inventory submitted by the Respondent for this facility indicates that highly reactive volatile organic compounds (HRVOC) are emitted from the

facility. For purposes of this **ADMINISTRATIVE ORDER**, HRVOC shall consist of 1,3-butadiene, butenes, ethylene, propylene, toluene and xylenes. The facility operates under multiple air permits.

## II.

The Baton Rouge area is in violation of both the 1-hour and 8-hour National Ambient Air Quality Standard. Ozone concentrations above these standards are a public health concern. The Baton Rouge area was classified as a "serious" ozone nonattainment area for the 1-hour ozone standard under the Clean Air Act Amendments of 1990 and given until November 1999 to achieve attainment of the standard. Despite good progress, the area failed to achieve attainment of the standard by the 1999 deadline. In June 2003, the 5-parish Baton Rouge Ozone Nonattainment area was reclassified to the next higher or "severe" classification by operation of law and given a new attainment date of November 2005. The reclassification to "severe" status brought with it many new requirements such as reformulated gasoline, regulation of smaller businesses, increased emission offsets for new sources or modification of existing sources, and possible Clean Air Act Section 185 penalty fees if the area fails to attain the standard by the November 2005 deadline. These measures will have a serious economic impact on Louisiana.

## III.

In June of 2004, EPA began implementing a new 8-hour ozone standard, under which the 5-parish Baton Rouge area was designated nonattainment and assigned a "marginal" classification with an attainment date of June 2007.

#### IV.

Ozone modeling has indicated that a nitrogen oxides (NO<sub>x</sub>) control strategy is needed to reduce regional ozone levels in the Baton Rouge area, and measures are in place that will result in substantial reductions in local NO<sub>x</sub> emissions. It appears that volatile organic compounds (VOC) and NO<sub>x</sub> reductions that have been made are adequate to prevent exceedances of the standard under most weather conditions except when HRVOC are present. The Department's research over the past three years has shown that releases of HRVOC have been associated with recent peaking episodes of elevated ozone that have led to exceedances of the 1-hour and 8-hour standards. Over this period of time, local industries handling the HRVOC have been asked to look at their operations and devise means to reduce the releases of these compounds. However, extensive sampling this summer shows releases of HRVOC continue to be a problem. The Department has monitored over 100 releases of HRVOC between January and August of this year.

#### V.

In addition to the unhealthful air, the ozone exceedances experienced this summer now make it impossible for the Baton Rouge area to achieve attainment of the 1-hour ozone standard by the November 2005 deadline. This failure to achieve attainment could lead to the implementation of Section 185 annual penalty fees computed to be about \$100 million per year for industries in the 5-parish area.

#### VI.

Elevated ozone episodes this summer will also make it exceedingly difficult for the Baton Rouge area to achieve attainment of the 8-hour ozone standard by June of 2007 as required. Failure

to achieve attainment by the 2007 deadline will likely result in a reclassification of the area upward from a "marginal" to a "moderate" classification and will likely bring additional control measures for the area.

## VII.

The continuing episodes of spiking ozone levels lead to periods of unhealthy air quality, and continuing burdensome requirements on industry, local businesses, local government, and the general public. Thus the Department requires the information outlined below to develop ozone control measures to protect the health of the citizens of Louisiana.

### **ADMINISTRATIVE ORDER**

Based on the foregoing, Respondent is hereby ordered:

#### I.

To submit to the Department, for approval, a plan for a fenceline monitoring program. The Respondent shall submit this plan to the Department within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER** and implement the fenceline monitoring program by no later than March 1, 2005. At a minimum, the fenceline monitoring program shall include the requirements listed in Attachment 1.

#### II.

To the extent required by law, further proceedings relating to this **ADMINISTRATIVE ORDER** will be governed by the Administrative Procedure Act, La. R.S. 49:950, et seq.

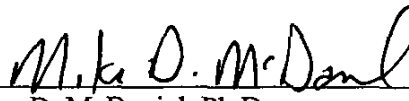
III

For each action or event described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

IV.

This **ADMINISTRATIVE ORDER** is effective upon receipt.

Baton Rouge, Louisiana, this 6<sup>th</sup> day of October, 2004.

  
\_\_\_\_\_  
Mike D. McDaniel, Ph.D.  
Secretary

Copies of correspondence should be sent to:

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312  
Attention: Jane LaCour



## Attachment 1

### Fence line Air Monitoring Requirements

Each facility shall be required to install a minimum of four air-monitoring stations. These stations should be located on or near the facility property boundary with at least one station positioned on each of the four main compass points (north, east, south, west) from the center of the facility. At least two of the stations shall be supplemented with a 10-meter meteorological tower equipped with sensors to continuously measure wind speed and direction. One meteorological tower shall be located in the predominant downwind direction from the center of the facility and another located in the predominant upwind direction from the center of the facility. The meteorological data shall be recorded & submitted to the Department as 10-minute averages.

Each monitoring station shall be equipped with a continuous total non-methane organic carbon (TNMOC) analyzer capable of detecting VOC concentrations of 0.1 ppm or less for each 10-minute period. This analyzer shall be operated year round with a data completeness of at least 85%. All data shall be recorded and submitted to the Department (Excel format) as 10-minute averages. The analyzer shall be integrated with a summa canister sampler capable of automatically collecting a 20-minute air sample (trigger sample) when the analyzer exceeds a predetermined concentration threshold. This threshold should be adjusted to insure a minimum of 5 samples are triggered each month when the meteorological data indicate the sample was impacted by emissions from the facility. Each canister sample shall be analyzed via gas chromatography/flame ionization detection for a compound target list approved by the Department. This target list shall include all ozone precursor VOCs emitted in significant amounts and any of the highly reactive volatile organic compounds emitted by the facility. The highly reactive VOCs include ethylene, propylene, butanes, 1,3-butadiene, toluene and xylenes. The analytical & quality assurance procedures shall be consistent with the ozone precursor analysis method outlined in EPA 600-R-98/161. The minimum detection limits for the analysis as calculated by the method set forth in 40 CFR Part 36(b) shall be no greater than 10 ppbC for each of the target analytes. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

In addition, each facility shall install a summa canister sampler capable of collecting a 24-hour integrated sample once every six days. The sampler may be located at one of the air monitoring stations or as an alternative may be installed off-site in a location determined to be in the predominant down-wind direction. This sample shall be analyzed by EPA method TO-14 or TO-15 to determine if any of the Louisiana ambient air quality standards for VOCs (see LAC 33:III.5112, Table 51.2) are being exceeded. The target analytes for these samples shall include at least the following compounds: 1,3-butadiene, vinyl chloride, 1,2-dichloroethane, benzene, toluene, chloroform, and methylene chloride. The minimum detection limits for each of the target analytes as calculated by the method set forth in 40 CFR Part 36(b) shall be the lesser of 0.5 ppbv or the applicable Louisiana annual average ambient air standard. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.



State of Louisiana  
Department of Environmental Quality



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

October 6, 2004

MIKE D. McDANIEL, Ph.D.  
SECRETARY

CERTIFIED MAIL (7099 3400 0007 2447 0127)  
RETURN RECEIPT REQUESTED

**PLACID REFINING COMPANY LLC**

c/o C T Corporation System  
Agent of Service  
8550 United Plaza Boulevard  
Baton Rouge, Louisiana 70809

**RE: ADMINISTRATIVE ORDER  
ENFORCEMENT TRACKING NO. AE-AO-04-0308  
AGENCY INTEREST NO. 2366**

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **ADMINISTRATIVE ORDER** is hereby served on **PLACID REFINING COMPANY LLC (RESPONDENT)**.

Any questions concerning this action should be directed to Sonya Eastern at (225) 219-3937 or Jane LaCour at (225) 219-3716.

Sincerely,

Peggy M. Hatch  
Administrator  
Enforcement Division

PMH/JL/efm  
Alt ID No. 3120-00012  
Attachment

c: Placid Refining Company LLC  
c/o Mr. Gary Fuller, Plant Manager  
1940 Louisiana Highway 1 North  
Port Allen, Louisiana 70767



OFFICE OF ENVIRONMENTAL COMPLIANCE • P.O. BOX 4312 • BATON ROUGE, LOUISIANA 70821-4312

AN EQUAL OPPORTUNITY EMPLOYER



**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE**

**IN THE MATTER**

**PLACID REFINING COMPANY LLC  
WEST BATON ROUGE PARISH  
ALT ID NO. 3120-00012**

**ENFORCEMENT TRACKING NO.**

**AE-AO-04-0308**

**AGENCY INTEREST NO.**

**PROCEEDINGS UNDER THE LOUISIANA  
ENVIRONMENTAL QUALITY ACT,  
La. R.S. 30:2001, ET SEQ.**

**2366**

**ADMINISTRATIVE ORDER**

The following **ADMINISTRATIVE ORDER** is issued to **PLACID REFINING COMPANY LLC (RESPONDENT)** by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2011(D)(6) and (D)(14).

**FINDINGS OF FACT**

**I.**

The Respondent owns and/or operates the Port Allen Refinery located at 1940 Louisiana Highway Number 1 North in Port Allen, West Baton Rouge Parish, Louisiana, which is within the 5-parish Baton Rouge Ozone Nonattainment area and is within close proximity to the Baton Rouge downtown area. The Respondent is permitted to emit highly reactive volatile organic compounds

(HRVOC) from the facility. For purposes of this **ADMINISTRATIVE ORDER**, HRVOC shall consist of 1,3-butadiene, butenes, ethylene, propylene, toluene and xylenes. The facility currently operates under multiple permits, including Air Permit Number 3120-00012-08 issued to the facility on September 27, 1994.

## II.

The Baton Rouge area is in violation of both the 1-hour and 8-hour National Ambient Air Quality Standard. Ozone concentrations above these standards are a public health concern. The Baton Rouge area was classified as a "serious" ozone nonattainment area for the 1-hour ozone standard under the Clean Air Act Amendments of 1990 and given until November 1999 to achieve attainment of the standard. Despite good progress, the area failed to achieve attainment of the standard by the 1999 deadline. In June 2003, the 5-parish Baton Rouge Ozone Nonattainment area was reclassified to the next higher or "severe" classification by operation of law and given a new attainment date of November 2005. The reclassification to "severe" status brought with it many new requirements such as reformulated gasoline, regulation of smaller businesses, increased emission offsets for new sources or modification of existing sources, and possible Clean Air Act Section 185 penalty fees if the area fails to attain the standard by the November 2005 deadline. These measures will have a serious economic impact on Louisiana.

## III.

In June of 2004, EPA began implementing a new 8-hour ozone standard, under which the 5-parish Baton Rouge area was designated nonattainment and assigned a "marginal" classification with an attainment date of June 2007.

#### IV.

Ozone modeling has indicated that a nitrogen oxides (NO<sub>x</sub>) control strategy is needed to reduce regional ozone levels in the Baton Rouge area, and measures are in place that will result in substantial reductions in local NO<sub>x</sub> emissions. It appears that volatile organic compounds (VOC) and NO<sub>x</sub> reductions that have been made are adequate to prevent exceedances of the standard under most weather conditions except when HRVOC are present. The Department's research over the past three years has shown that releases of HRVOC have been associated with recent peaking episodes of elevated ozone that have led to exceedances of the 1-hour and 8-hour standards. Over this period of time, local industries handling the HRVOC have been asked to look at their operations and devise means to reduce the releases of these compounds. However, extensive sampling this summer shows releases of HRVOC to continue to be a problem. The Department has monitored over 100 releases of HRVOC between January and August of this year.

#### V.

In addition to the unhealthful air, the ozone exceedances experienced this summer now make it impossible for the Baton Rouge area to achieve attainment of the 1-hour ozone standard by the November 2005 deadline. This failure to achieve attainment could lead to the implementation of Section 185 annual penalty fees computed to be about \$100 million per year for industries in the 5-parish area.

## VI.

Elevated ozone episodes this summer will also make it exceedingly difficult for the Baton Rouge area to achieve attainment of the 8-hour ozone standard by June of 2007 as required. Failure to achieve attainment by the 2007 deadline will likely result in a reclassification of the area upward from a "marginal" to a "moderate" classification and will likely bring additional control measures for the area.

## VII.

Five of the six exceedances in 2004 have been in the Baton Rouge downtown area with one exceedance at the Carville monitor. Wind direction data indicate that the ozone that caused the exceedance at Carville was transported from the downtown area. Data collected on days of exceedances strongly indicates that the HRVOC available for ozone formation came from sources in the local downtown area. Over 40% of the air samples taken this year contained ethylene and propylene.

## VIII.

The continuing episodes of spiking ozone levels lead to periods of unhealthy air quality, and continuing burdensome requirements on industry, local businesses, local government, and the general public. Thus the Department requires the information outlined below to develop ozone control measures to protect the health of the citizens of Louisiana.

## **ADMINISTRATIVE ORDER**

Based on the foregoing, Respondent is hereby ordered:

### **I.**

To submit to the Department, for approval, a plan for a fenceline monitoring program. Respondent shall submit this plan to the Department within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER** and implement the fenceline monitoring program by no later than March 1, 2005. At a minimum, the fenceline monitoring program shall include the requirements listed in Attachment 1.

### **II.**

To conduct a comprehensive environmental audit of the facility's operations for the purposes of documenting all potential sources of releases of HRVOC and to perform testing of certain specified emissions sources. An environmental audit and testing plan shall be submitted to the Department for approval within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER**. At a minimum, the environmental audit and testing plan shall include the requirements listed in Attachment 2. The Respondent shall implement the approved environmental audit and testing plan by no later than December 1, 2004. The results of the environmental audit and testing shall be submitted to the Department by no later than March 1, 2005.

### **III.**

To the extent required by law, further proceedings relating to this **ADMINISTRATIVE ORDER** will be governed by the Administrative Procedure Act, La. R.S. 49:950, et seq.

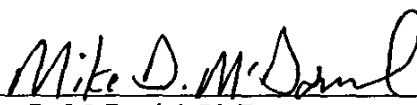
IV.

For each action or event described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

V.

This **ADMINISTRATIVE ORDER** is effective upon receipt.

Baton Rouge, Louisiana, this 6<sup>th</sup> day of October, 2004.

  
\_\_\_\_\_  
Mike D. McDaniel, Ph.D.  
Secretary

Copies of correspondence should be sent to:

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312  
Attention: Jane LaCour



# Attachment 1

## Fence line Air Monitoring Requirements

Each facility shall be required to install a minimum of four air-monitoring stations. These stations should be located on or near the facility property boundary with at least one station positioned on each of the four main compass points (north, east, south, west) from the center of the facility. At least two of the stations shall be supplemented with a 10-meter meteorological tower equipped with sensors to continuously measure wind speed and direction. One meteorological tower shall be located in the predominant downwind direction from the center of the facility and another located in the predominant upwind direction from the center of the facility. The meteorological data shall be recorded & submitted to the Department as 10-minute averages.

Each monitoring station shall be equipped with a continuous total non-methane organic carbon (TNMOC) analyzer capable of detecting VOC concentrations of 0.1 ppm or less for each 10-minute period. This analyzer shall be operated year round with a data completeness of at least 85%. All data shall be recorded and submitted to the Department (Excel format) as 10-minute averages. The analyzer shall be integrated with a summa canister sampler capable of automatically collecting a 20-minute air sample (trigger sample) when the analyzer exceeds a predetermined concentration threshold. This threshold should be adjusted to insure a minimum of 5 samples are triggered each month when the meteorological data indicate the sample was impacted by emissions from the facility. Each canister sample shall be analyzed via gas chromatography/flame ionization detection for a compound target list approved by the Department. This target list shall include all ozone precursor VOCs emitted in significant amounts and any of the highly reactive volatile organic compounds emitted by the facility. The highly reactive VOCs include ethylene, propylene, butanes, 1,3-butadiene, toluene and xylenes. The analytical & quality assurance procedures shall be consistent with the ozone precursor analysis method outlined in EPA 600-R-98/161. The minimum detection limits for the analysis as calculated by the method set forth in 40 CFR Part 36(b) shall be no greater than 10 ppbC for each of the target analytes. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

In addition, each facility shall install a summa canister sampler capable of collecting a 24-hour integrated sample once every six days. The sampler may be located at one of the air monitoring stations or as an alternative may be installed off-site in a location determined to be in the predominant down-wind direction. This sample shall be analyzed by EPA method TO-14 or TO-15 to determine if any of the Louisiana ambient air quality standards for VOCs (see LAC 33:III.5112, Table 51.2) are being exceeded. The target analytes for these samples shall include at least the following compounds: 1,3-butadiene, vinyl chloride, 1,2-dichloroethane, benzene, toluene, chloroform, and methylene chloride. The minimum detection limits for each of the target analytes as calculated by the method set forth in 40 CFR Part 36(b) shall be the lesser of 0.5 ppbv or the applicable Louisiana annual average ambient air standard. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

## Attachment 2

### Placid Refining Company LLC

#### Environmental Program Audit and Testing

The respondent shall perform the following audits and source testing of units at their site. An emission inventory for 2004 operations, reflecting the results of the audits and source testing, shall be submitted by March 1, 2005.

1. Conduct an audit of the entire facility to document all units that handle highly reactive volatile organic compounds (HRVOC).

2. Conduct a comprehensive environmental audit of all units at the facility where highly reactive volatile organic compounds (HRVOC) are handled for the purpose of documenting all potential release sources of HRVOC. These potential sources shall include a) routine or continuous emission sources, b) non-routine sources such as from equipment openings/clearings, start-ups/shutdowns, malfunctions, upsets, flaring, loading/unloadings, maintenance activities and leaks, c) emergency/safety emissions sources, and d) any other emission source not listed. Small sources such as analyzer vents and sources from incoming and outgoing pipelines shall be included in the audit. Fugitive emission sources are addressed in Item 2 below.

For each documented source, the respondent shall provide a) description of the source including the Department's point identification for previously reported sources, b) amount of each HRVOC in the emission stream in pounds per year for routine sources and in total pounds per event for other sources, and c) description of the methodology used to determine the amount. For non-routine sources and emergency/safety emissions sources, the respondent shall also include the date, time and duration of each release and a description of the reason for the release.

3. Conduct a comprehensive audit of the leak detection and repair (LDAR) program where HRVOC are handled to document that all regulated sources are included. All sources that are found to be missing from the LDAR program shall be brought into the program within 30 days, monitored and the results reported in the results report. Additionally, all tagged, leaking sources in HRVOC service from the current LDAR program shall be listed along with the amount of each HRVOC leaking in pounds per hour, the date that the leak was located, and the date that the leak will be repaired.

4. Conduct testing or other Department-approved methodology to confirm emissions estimates for HRVOC transport activities including loading, unloading and storage, and incoming and outgoing pipelines, associated with the facility.

5. Conduct Department-approved testing of all flares that handle HRVOC and have a reported destruction efficiency greater than ninety-eight (98) percent to confirm the claimed destruction efficiency.

6. Conduct sampling of all inlets to cooling towers with potential HRVOC emissions. The results report shall include the sampling results, a description of the source of any HRVOC found in the sample and the total amount in pounds of each HRVOC that was emitted.

7. Conduct testing, following the Department's stack testing guidelines, of the HRVOC sources listed below for the purpose of confirming emissions estimates. Any deviations from stack testing guidelines shall be approved by the Department prior to testing.

Respondent shall include in the environmental audit and testing plan information on equipment with HRVOC emissions that is not covered by items 4, 5, and 6 above. The information shall include the name of the equipment, the emission inventory vent number, and the amount of each HRVOC in the emission vent.



State of Louisiana  
Department of Environmental Quality



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

October 6, 2004

MIKE D. McDANIEL, Ph.D.  
SECRETARY

CERTIFIED MAIL (7002 2030 0002 8914 0574)  
RETURN RECEIPT REQUESTED

**ENTERPRISE PRODUCTS OPERATING, L.P.**

c/o C T Corporation System  
Agent of Service  
8550 United Plaza Boulevard  
Baton Rouge, Louisiana 70809

**RE: ADMINISTRATIVE ORDER  
ENFORCEMENT TRACKING NO. AE-AO-04-0307  
AGENCY INTEREST NO. 40198**

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **ADMINISTRATIVE ORDER** is hereby served on **ENTERPRISE PRODUCTS OPERATING, L.P. (RESPONDENT)**.

Any questions concerning this action should be directed to Sonya Eastern at (225)219-3937 or Jane LaCour at (225)219-3716.

Sincerely,

Peggy M. Match  
Administrator  
Enforcement Division

PMH/ALF/alf  
Alt ID No. 3120-00065  
Attachment

c: Enterprise Products Operating, L.P.  
c/o T. Helfgott  
Post Office Box 4324  
Houston, Texas 77210-4324



OFFICE OF ENVIRONMENTAL COMPLIANCE • P.O. BOX 4312 • BATON ROUGE, LOUISIANA 70821-4312

AN EQUAL OPPORTUNITY EMPLOYER



**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**OFFICE OF ENVIRONMENTAL COMPLIANCE**

**IN THE MATTER**

**ENTERPRISE PRODUCTS OPERATING, L.P. \*  
WEST BATON ROUGE PARISH \*  
ALT ID NO. 3120-00065 \***

**ENFORCEMENT TRACKING NO.**

**AE-AO-04-0307**

**AGENCY INTEREST NO.**

**PROCEEDINGS UNDER THE LOUISIANA \*  
ENVIRONMENTAL QUALITY ACT, \*  
La. R.S. 30:2001, ET SEQ. \***

**40198**

**ADMINISTRATIVE ORDER**

The following **ADMINISTRATIVE ORDER** is issued to **ENTERPRISE PRODUCTS OPERATING, L.P. (RESPONDENT)** by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2011(D)(6) and (D)(14).

**FINDINGS OF FACT**

**I.**

The Respondent owns and/or operates the Baton Rouge Fractionator and Splitter Units located at 2220 North River Road in Port Allen, West Baton Rouge Parish, Louisiana, which is within the 5-parish Baton Rouge Ozone Nonattainment area. The most recent emission inventory submitted by the Respondent for this facility indicates that highly reactive volatile organic

compounds (HRVOC) are emitted from the facility. For purposes of this **ADMINISTRATIVE ORDER**, HRVOC shall consist of 1,3-butadiene, butenes, ethylene, propylene, toluene and xylenes. The facility operates under Title V Permit Number 3120-00065-V0 issued on September 18, 1998.

## II.

The Baton Rouge area is in violation of both the 1-hour and 8-hour National Ambient Air Quality Standard. Ozone concentrations above these standards are a public health concern. The Baton Rouge area was classified as a "serious" ozone nonattainment area for the 1-hour ozone standard under the Clean Air Act Amendments of 1990 and given until November 1999 to achieve attainment of the standard. Despite good progress, the area failed to achieve attainment of the standard by the 1999 deadline. In June 2003, the 5-parish Baton Rouge Ozone Nonattainment area was reclassified to the next higher or "severe" classification by operation of law and given a new attainment date of November 2005. The reclassification to "severe" status brought with it many new requirements such as reformulated gasoline, regulation of smaller businesses, increased emission offsets for new sources or modification of existing sources, and possible Clean Air Act Section 185 penalty fees if the area fails to attain the standard by the November 2005 deadline. These measures will have a serious economic impact on Louisiana.

## III.

In June of 2004, EPA began implementing a new 8-hour ozone standard, under which the 5-parish Baton Rouge area was designated nonattainment and assigned a "marginal" classification with an attainment date of June 2007.

#### IV.

Ozone modeling has indicated that a nitrogen oxides (NO<sub>x</sub>) control strategy is needed to reduce regional ozone levels in the Baton Rouge area, and measures are in place that will result in substantial reductions in local NO<sub>x</sub> emissions. It appears that volatile organic compounds (VOC) and NO<sub>x</sub> reductions that have been made are adequate to prevent exceedances of the standard under most weather conditions except when HRVOC are present. The Department's research over the past three years has shown that releases of HRVOC have been associated with recent peaking episodes of elevated ozone that have led to exceedances of the 1-hour and 8-hour standards. Over this period of time, local industries handling the HRVOC have been asked to look at their operations and devise means to reduce the releases of these compounds. However, extensive sampling this summer shows releases of HRVOC to continue to be a problem. The Department has monitored over 100 releases of HRVOC between January and August of this year.

#### V.

In addition to the unhealthful air, the ozone exceedances experienced this summer now make it impossible for the Baton Rouge area to achieve attainment of the 1-hour ozone standard by the November 2005 deadline. This failure to achieve attainment could lead to the implementation of Section 185 annual penalty fees computed to be about \$100 million per year for industries in the 5-parish area.

#### VI.

Elevated ozone episodes this summer will also make it exceedingly difficult for the Baton Rouge area to achieve attainment of the 8-hour ozone standard by June of 2007 as required. Failure to achieve attainment by the 2007 deadline will likely result in a reclassification of the area upward

from a "marginal" to a "moderate" classification and will likely bring additional control measures for the area.

#### VII.

Five of the six exceedances in 2004 have been in the Baton Rouge downtown area with one exceedance at the Carville monitor. Wind direction data indicate that the ozone that caused the exceedance at Carville was transported from the downtown area. Data collected on days of exceedances strongly indicates that the HRVOC available for ozone formation came from sources in the local downtown area. Over 40% of the air samples taken this year contained ethylene and propylene.

#### VIII.

The continuing episodes of spiking ozone levels lead to periods of unhealthy air quality, and continuing burdensome requirements on industry, local businesses, local government, and the general public. Thus the Department requires the information outlined below to develop ozone control measures to protect the health of the citizens of Louisiana.

### **ADMINISTRATIVE ORDER**

**Based on the foregoing, Respondent is hereby ordered:**

#### I.

To submit to the Department, for approval, a plan for a fenceline monitoring program. The Respondent shall submit this plan to the Department within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER** and implement the fenceline monitoring program by no later than March 1, 2005. At a minimum, the fenceline monitoring program shall include the requirements listed in Attachment 1.



## II.

To conduct a comprehensive environmental audit of the facility's operations for the purposes of documenting all potential sources of releases of HRVOC and to perform testing of certain specified emissions sources. An environmental audit and testing plan shall be submitted to the Department for approval within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER**. At a minimum, the environmental audit and testing plan shall include the requirements listed in Attachment 2. The Respondent shall implement the approved environmental audit and testing plan by no later than December 1, 2004. The results of the environmental audit and testing shall be submitted to the Department by no later than March 1, 2005.

## III.

To the extent required by law, further proceedings relating to this **ADMINISTRATIVE ORDER** will be governed by the Administrative Procedure Act, La. R.S. 49:950, et seq.


## IV.

For each action or event described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

V.

This **ADMINISTRATIVE ORDER** is effective upon receipt.

Baton Rouge, Louisiana, this 6<sup>th</sup> day of October, 2004.

  
\_\_\_\_\_  
Mike D. McDaniel, Ph.D.  
Secretary

Copies of correspondence should be sent to:

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312  
Attention: Jane LaCour

## Attachment 1

### Fence line Air Monitoring Requirements

Each facility shall be required to install a minimum of four air-monitoring stations. These stations should be located on or near the facility property boundary with at least one station positioned on each of the four main compass points (north, east, south, west) from the center of the facility. At least two of the stations shall be supplemented with a 10-meter meteorological tower equipped with sensors to continuously measure wind speed and direction. One meteorological tower shall be located in the predominant downwind direction from the center of the facility and another located in the predominant upwind direction from the center of the facility. The meteorological data shall be recorded & submitted to the Department as 10-minute averages.

Each monitoring station shall be equipped with a continuous total non-methane organic carbon (TNMOC) analyzer capable of detecting VOC concentrations of 0.1 ppm or less for each 10-minute period. This analyzer shall be operated year round with a data completeness of at least 85%. All data shall be recorded and submitted to the Department (Excel format) as 10-minute averages. The analyzer shall be integrated with a summa canister sampler capable of automatically collecting a 20-minute air sample (trigger sample) when the analyzer exceeds a predetermined concentration threshold. This threshold should be adjusted to insure a minimum of 5 samples are triggered each month when the meteorological data indicate the sample was impacted by emissions from the facility. Each canister sample shall be analyzed via gas chromatography/flame ionization detection for a compound target list approved by the Department. This target list shall include all ozone precursor VOCs emitted in significant amounts and any of the highly reactive volatile organic compounds emitted by the facility. The highly reactive VOCs include ethylene, propylene, butanes, 1,3-butadiene, toluene and xylenes. The analytical & quality assurance procedures shall be consistent with the ozone precursor analysis method outlined in EPA 600-R-98/161. The minimum detection limits for the analysis as calculated by the method set forth in 40 CFR Part 36(b) shall be no greater than 10 ppbC for each of the target analytes. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

In addition, each facility shall install a summa canister sampler capable of collecting a 24-hour integrated sample once every six days. The sampler may be located at one of the air monitoring stations or as an alternative may be installed off-site in a location determined to be in the predominant down-wind direction. This sample shall be analyzed by EPA method TO-14 or TO-15 to determine if any of the Louisiana ambient air quality standards for VOCs (see LAC 33:III.5112, Table 51.2) are being exceeded. The target analytes for these samples shall include at least the following compounds: 1,3-butadiene, vinyl chloride, 1,2-dichloroethane, benzene, toluene, chloroform, and methylene chloride. The minimum detection limits for each of the target analytes as calculated by the method set forth in 40 CFR Part 36(b) shall be the lesser of 0.5 ppbv or the applicable Louisiana annual average ambient air standard. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

## Attachment 2

### Enterprise Products Operating, L.P.

#### Environmental Program Audit and Testing

The respondent shall perform the following audits and source testing of units at their site. An emission inventory for 2004 operations, reflecting the results of the audits and source testing, shall be submitted by March 1, 2005.

1. Conduct an audit of the entire facility to document all units that handle highly reactive volatile organic compounds (HRVOC).

2. Conduct a comprehensive environmental audit of all units at the facility where highly reactive volatile organic compounds (HRVOC) are handled for the purpose of documenting all potential release sources of HRVOC. These potential sources shall include a) routine or continuous emission sources, b) non-routine sources such as from equipment openings/clearings, start-ups/shutdowns, malfunctions, upsets, flaring, loading/unloadings, maintenance activities and leaks, c) emergency/safety emissions sources, and d) any other emission source not listed. Small sources such as analyzer vents and sources from incoming and outgoing pipelines shall be included in the audit. Fugitive emission sources are addressed in Item 2 below.

For each documented source, the respondent shall provide a) description of the source including the departmental point identification for previously reported sources, b) amount of each HRVOC in the emission stream in pounds per year for routine sources and in total pounds per event for other sources, and c) description of the methodology used to determine the amount. For non-routine sources and emergency/safety emissions sources, the respondent shall also include the date, time and duration of each release and a description of the reason for the release.

3. Conduct a comprehensive audit of the leak detection and repair (LDAR) program where HRVOC are handled to document that all regulated sources are included. All sources that are found to be missing from the LDAR program shall be brought into the program within 30 days, monitored and the results reported in the results report. Additionally, all tagged, leaking sources in HRVOC service from the current LDAR program shall be listed along with the amount of each HRVOC leaking in pounds per hour, the date that the leak was located, and the date that the leak will be repaired.

4. Conduct testing or other departmental approved methodology to confirm emissions estimates for HRVOC transport activities including loading, unloading and storage, and incoming and outgoing pipelines, associated with the facility.

5. Conduct Department-approved testing of all flares that handle HRVOC and have a reported destruction efficiency greater than ninety-eight (98) percent to confirm the claimed destruction efficiency.

6. Conduct sampling of all inlets to cooling towers with potential HRVOC emissions. The results report shall include the sampling results, a description of the source of any HRVOC found in the sample and the total amount in pounds of each HRVOC that was emitted.



**State of Louisiana**  
**Department of Environmental Quality**



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

October 6, 2004

MIKE D. McDANIEL, Ph.D.  
SECRETARY

CERTIFIED MAIL (7002 2030 0002 8909 6338)  
RETURN RECEIPT REQUESTED

**EXXON MOBIL CORPORATION**  
c/o Corporation Service Company  
Agent of Service  
320 Somerulos Street  
Baton Rouge, Louisiana 70802-6129

**RE: ADMINISTRATIVE ORDER**  
**ENFORCEMENT TRACKING NO. AE-AO-04-0304**  
**AGENCY INTEREST NO. 2638**

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **ADMINISTRATIVE ORDER** is hereby served on **EXXON MOBIL CORPORATION (RESPONDENT)**.

Any questions concerning this action should be directed to Sonya Eastern at (225) 219-3937 or Jane LaCour at (225) 219-3716.

Sincerely,

Peggy M. Hatch  
Administrator  
Enforcement Division

PMH/JCA/jl  
Alt ID No. 0840-00015  
Attachment



OFFICE OF ENVIRONMENTAL COMPLIANCE • P.O. BOX 4312 • BATON ROUGE, LOUISIANA 70821-4312

AN EQUAL OPPORTUNITY EMPLOYER



c: Mr. W.D. Fellows, Environmental Manager  
Exxon Mobil Corporation  
Baton Rouge Refinery  
P.O. Box 551  
Baton Rouge, LA 70821

**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE**

**IN THE MATTER**

**EXXON MOBIL CORPORATION  
EAST BATON ROUGE PARISH  
ALT ID NO. 0840-00015**

**PROCEEDINGS UNDER THE LOUISIANA  
ENVIRONMENTAL QUALITY ACT,  
La. R.S. 30:2001, ET SEQ.**

*	
*	
*	<b>ENFORCEMENT TRACKING NO.</b>
*	
*	<b>AE-AO-04-0304</b>
*	
*	<b>AGENCY INTEREST NO.</b>
*	
*	<b>2638</b>
*	
*	

**ADMINISTRATIVE ORDER**

The following **ADMINISTRATIVE ORDER** is issued to **EXXON MOBIL CORPORATION (RESPONDENT)** by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2011(D)(6) and (D)(14).

**FINDINGS OF FACT**

**I.**

The Respondent owns and/or operates a petroleum refinery located at 4045 Scenic Highway in Baton Rouge, East Baton Rouge Parish, Louisiana, which is within the 5-parish Baton Rouge Ozone Nonattainment area and is within close proximity to the Baton Rouge downtown area. The most recent emission inventory submitted by the Respondent for this facility indicates that highly reactive volatile organic compounds (HRVOC) are emitted from the facility. For purposes of this



**ADMINISTRATIVE ORDER**, HRVOC shall consist of 1,3-butadiene, butenes, ethylene, propylene, toluene and xylenes. The facility operates under multiple air permits.

## II.

The Baton Rouge area is in violation of both the 1-hour and 8-hour National Ambient Air Quality Standard. Ozone concentrations above these standards are a public health concern. The Baton Rouge area was classified as a "serious" ozone nonattainment area for the 1-hour ozone standard under the Clean Air Act Amendments of 1990 and given until November 1999 to achieve attainment of the standard. Despite good progress, the area failed to achieve attainment of the standard by the 1999 deadline. In June 2003, the 5-parish Baton Rouge Ozone Nonattainment area was reclassified to the next higher or "severe" classification by operation of law and given a new attainment date of November 2005. The reclassification to "severe" status brought with it many new requirements such as reformulated gasoline, regulation of smaller businesses, increased emission offsets for new sources or modification of existing sources, and possible Clean Air Act Section 185 penalty fees if the area fails to attain the standard by the November 2005 deadline. These measures will have a serious economic impact on Louisiana.

## III.

In June of 2004, EPA began implementing a new 8-hour ozone standard, under which the 5-parish Baton Rouge area was designated nonattainment and assigned a "marginal" classification with an attainment date of June 2007.

## IV.

Ozone modeling has indicated that a nitrogen oxides (NO<sub>x</sub>) control strategy is needed to reduce regional ozone levels in the Baton Rouge area, and measures are in place that will result in substantial reductions in local NO<sub>x</sub> emissions. It appears that volatile organic compounds (VOC)

and NO<sub>x</sub> reductions that have been made are adequate to prevent exceedances of the standard under most weather conditions except when HRVOC are present. The Department's research over the past three years has shown that releases of HRVOC have been associated with recent peaking episodes of elevated ozone that have led to exceedances of the 1-hour and 8-hour standards. Over this period of time, local industries handling the HRVOC have been asked to look at their operations and devise means to reduce the releases of these compounds. However, extensive sampling this summer shows releases of HRVOC to continue to be a problem. The Department has monitored over 100 releases of HRVOC between January and August of this year.

#### V.

In addition to the unhealthy air, the ozone exceedances experienced this summer now make it impossible for the Baton Rouge area to achieve attainment of the 1-hour ozone standard by the November 2005 deadline. This failure to achieve attainment could lead to the implementation of Section 185 annual penalty fees computed to be about \$100 million per year for industries in the 5-parish area.

#### VI.

Elevated ozone episodes this summer will also make it exceedingly difficult for the Baton Rouge area to achieve attainment of the 8-hour ozone standard by June of 2007 as required. Failure to achieve attainment by the 2007 deadline will likely result in a reclassification of the area upward from a "marginal" to a "moderate" classification and will likely bring additional control measures for the area.

#### VII.

Five of the six exceedances in 2004 have been in the Baton Rouge downtown area with one exceedance at the Carville monitor. Wind direction data indicate that the ozone that caused the

exceedance at Carville was transported from the downtown area. Data collected on days of exceedances strongly indicates that the HRVOC available for ozone formation came from sources in the local downtown area. Over 40% of the air samples taken this year contained ethylene and propylene.

#### VIII.

The continuing episodes of spiking ozone levels lead to periods of unhealthy air quality, and continuing burdensome requirements on industry, local businesses, local government, and the general public. Thus the Department requires the information outlined below to develop ozone control measures to protect the health of the citizens of Louisiana.

#### **ADMINISTRATIVE ORDER**

Based on the foregoing, Respondent is hereby ordered:

##### I.

To submit to the Department, for approval, a plan for a fenceline monitoring program. The Respondent shall submit this plan to the Department within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER** and implement the fenceline monitoring program by no later than March 1, 2005. At a minimum, the fenceline monitoring program shall include the requirements listed in Attachment 1.

##### II.

To conduct a comprehensive environmental audit of the facility's operations for the purposes of documenting all potential sources of releases of HRVOC and to perform testing of certain specified emissions sources. An environmental audit and testing plan shall be submitted to the Department for approval within forty-five (45) days of receipt of this **ADMINISTRATIVE**

**ORDER.** At a minimum, the environmental audit and testing plan shall include the requirements listed in Attachment 2. The Respondent shall implement the approved environmental audit and testing plan by no later than December 1, 2004. The results of the environmental audit and testing shall be submitted to the Department by no later than March 1, 2005.

III.

To the extent required by law, further proceedings relating to this **ADMINISTRATIVE ORDER** will be governed by the Administrative Procedure Act, La. R.S. 49:950, et seq.

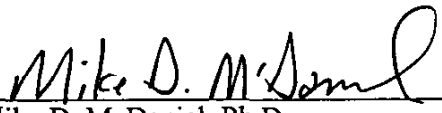
IV.

For each action or event described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

V.

This **ADMINISTRATIVE ORDER** is effective upon receipt.

Baton Rouge, Louisiana, this 6<sup>th</sup> day of October, 2004.

  
Mike D. McDaniel, Ph.D.  
Secretary

Copies of correspondence should be sent to:

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312  
Attention: Jane LaCour

## Attachment 1

### Fence line Air Monitoring Requirements

Each facility shall be required to install a minimum of four air-monitoring stations. These stations should be located on or near the facility property boundary with at least one station positioned on each of the four main compass points (north, east, south, west) from the center of the facility. At least two of the stations shall be supplemented with a 10-meter meteorological tower equipped with sensors to continuously measure wind speed and direction. One meteorological tower shall be located in the predominant downwind direction from the center of the facility and another located in the predominant upwind direction from the center of the facility. The meteorological data shall be recorded & submitted to the Department as 10-minute averages.

Each monitoring station shall be equipped with a continuous total non-methane organic carbon (TNMOC) analyzer capable of detecting VOC concentrations of 0.1 ppm or less for each 10-minute period. This analyzer shall be operated year round with a data completeness of at least 85%. All data shall be recorded and submitted to the Department (Excel format) as 10-minute averages. The analyzer shall be integrated with a summa canister sampler capable of automatically collecting a 20-minute air sample (trigger sample) when the analyzer exceeds a predetermined concentration threshold. This threshold should be adjusted to insure a minimum of 5 samples are triggered each month when the meteorological data indicate the sample was impacted by emissions from the facility. Each canister sample shall be analyzed via gas chromatography/flame ionization detection for a compound target list approved by the Department. This target list shall include all ozone precursor VOCs emitted in significant amounts and any of the highly reactive volatile organic compounds emitted by the facility. The highly reactive VOCs include ethylene, propylene, butanes, 1,3-butadiene, toluene and xylenes. The analytical & quality assurance procedures shall be consistent with the ozone precursor analysis method outlined in EPA 600-R-98/161. The minimum detection limits for the analysis as calculated by the method set forth in 40 CFR Part 36(b) shall be no greater than 10 ppbC for each of the target analytes. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

In addition, each facility shall install a summa canister sampler capable of collecting a 24-hour integrated sample once every six days. The sampler may be located at one of the air monitoring stations or as an alternative may be installed off-site in a location determined to be in the predominant down-wind direction. This sample shall be analyzed by EPA method TO-14 or TO-15 to determine if any of the Louisiana ambient air quality standards for VOCs (see LAC 33:III.5112, Table 51.2) are being exceeded. The target analytes for these samples shall include at least the following compounds: 1,3-butadiene, vinyl chloride, 1,2-dichloroethane, benzene, toluene, chloroform, and methylene chloride. The minimum detection limits for each of the target analytes as calculated by the method set forth in 40 CFR Part 36(b) shall be the lesser of 0.5 ppbv or the applicable Louisiana annual average ambient air standard. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

## Attachment 2

### ExxonMobil Corporation Baton Rouge Refinery

#### Environmental Program Audit and Testing

The respondent shall perform the following audits and source testing of units at their site. An emission inventory for 2004 operations, reflecting the results of the audits and source testing, shall be submitted by March 1, 2005.

1. Conduct an audit of the entire facility to document all units that handle highly reactive volatile organic compounds (HRVOC).
2. Conduct a comprehensive environmental audit of all units at the facility where highly reactive volatile organic compounds (HRVOC) are handled for the purpose of documenting all potential release sources of HRVOC. These potential sources shall include a) routine or continuous emission sources, b) non-routine sources such as from equipment openings/clearings, start-ups/shutdowns, malfunctions, upsets, flaring, loading/unloadings, maintenance activities and leaks, c) emergency/safety emissions sources, and d) any other emission source not listed. Small sources such as analyzer vents and sources from incoming and outgoing pipelines shall be included in the audit. Fugitive emission sources are addressed in Item 2 below.

For each documented source, the respondent shall provide a) description of the source including the Department's point identification for previously reported sources, b) amount of each HRVOC in the emission stream in pounds per year for routine sources and in total pounds per event for other sources, and c) description of the methodology used to determine the amount. For non-routine sources and emergency/safety emissions sources, the respondent shall also include the date, time and duration of each release and a description of the reason for the release.

3. Conduct a comprehensive audit of the leak detection and repair (LDAR) program where HRVOC are handled to document that all regulated sources are included. All sources that are found to be missing from the LDAR program shall be brought into the program within 30 days, monitored and the results reported in the results report. Additionally, all tagged, leaking sources in HRVOC service from the current LDAR program shall be listed along with the amount of each HRVOC leaking in pounds per hour, the date that the leak was located, and the date that the leak will be repaired.
4. Conduct testing or other Department-approved methodology to confirm emissions estimates for HRVOC transport activities including loading, unloading and storage, and incoming and outgoing pipelines, associated with the facility:

5. Conduct Department-approved testing of all flares that handle HRVOC and have a reported destruction efficiency greater than ninety-eight (98) percent to confirm the claimed destruction efficiency.

6. Conduct sampling of all inlets to cooling towers with potential HRVOC emissions. The results report shall include the sampling results, a description of the source of any HRVOC found in the sample and the total amount in pounds of each HRVOC that was emitted.

7. Conduct testing, following the Department's stack testing guidelines, of the HRVOC sources listed below for the purpose of confirming emissions estimates. Any deviations from stack testing guidelines shall be approved by the Department prior to testing.

PHLA Reactor Purge Vent, point number A3, toluene and xylenes

Wet Gas Scrubber, point number 73, 1-3, butadiene, toluene and xylenes



**State of Louisiana**  
**Department of Environmental Quality**



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

October 6, 2004

MIKE D. McDANIEL, Ph.D.  
SECRETARY

CERTIFIED MAIL (7002 2030 0002 8909 6314)  
RETURN RECEIPT REQUESTED

**EXXON MOBIL CORPORATION**  
c/o Corporation Service Company  
Agent of Service  
320 Somerulos Street  
Baton Rouge, Louisiana 70802-6129

**RE: ADMINISTRATIVE ORDER**  
**ENFORCEMENT TRACKING NO. AE-AO-04-0302**  
**AGENCY INTEREST NO. 3519**

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **ADMINISTRATIVE ORDER** is hereby served on **EXXON MOBIL CORPORATION (RESPONDENT)**.

Any questions concerning this action should be directed to Sonya Eastern at (225) 219-3937 or Jane LaCour at (225) 219-3716.

Sincerely,

Peggy M. Hatch  
Administrator  
Enforcement Division

PMH/JCA/jl  
Alt ID No. 0840-00003  
Attachment





c: ExxonMobil Chemical Company  
c/o Mr. Frank Bains  
Manager Safety & environmental Affairs  
Post Office Box 53006  
Baton Rouge, Louisiana 70892-3006

**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE**

**IN THE MATTER**

**EXXON MOBIL CORPORATION  
EAST BATON ROUGE PARISH  
ALT ID NO. 0840-00003**

**PROCEEDINGS UNDER THE LOUISIANA  
ENVIRONMENTAL QUALITY ACT,  
La. R.S. 30:2001, ET SEQ.**

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**ENFORCEMENT TRACKING NO.**

**AE-AO-04-0302**

**AGENCY INTEREST NO.**

**3519**

**ADMINISTRATIVE ORDER**

The following **ADMINISTRATIVE ORDER** is issued to **EXXON MOBIL CORPORATION (RESPONDENT)** by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2011(D)(6) and (D)(14).

**FINDINGS OF FACT**

**I.**

The Respondent owns and/or operates the Baton Rouge Polyolefins Plant located at 12875 U.S. Highway 61 in Baton Rouge, East Baton Rouge Parish, Louisiana, which is within the 5-parish Baton Rouge Ozone Nonattainment area and is within close proximity to the Baton Rouge downtown area. The most recent emission inventory submitted by the Respondent for this facility indicates that highly reactive volatile organic compounds (HRVOC) are emitted from the facility.

For purposes of this **ADMINISTRATIVE ORDER**, HRVOC shall consist of 1,3-butadiene, butenes, ethylene, propylene, toluene and xylenes. The facility operates under Air Permit Number 0840-00018-V2 issued on October 31, 2001.

## II.

The Baton Rouge area is in violation of both the 1-hour and 8-hour National Ambient Air Quality Standard. Ozone concentrations above these standards are a public health concern. The Baton Rouge area was classified as a “serious” ozone nonattainment area for the 1-hour ozone standard under the Clean Air Act Amendments of 1990 and given until November 1999 to achieve attainment of the standard. Despite good progress, the area failed to achieve attainment of the standard by the 1999 deadline. In June 2003, the 5-parish Baton Rouge Ozone Nonattainment area was reclassified to the next higher or “severe” classification by operation of law and given a new attainment date of November 2005. The reclassification to “severe” status brought with it many new requirements such as reformulated gasoline, regulation of smaller businesses, increased emission offsets for new sources or modification of existing sources, and possible Clean Air Act Section 185 penalty fees if the area fails to attain the standard by the November 2005 deadline. These measures will have a serious economic impact on Louisiana.

## III.

In June of 2004, EPA began implementing a new 8-hour ozone standard, under which the 5-parish Baton Rouge area was designated nonattainment and assigned a “marginal” classification with an attainment date of June 2007.

## IV.

Ozone modeling has indicated that a nitrogen oxides (NO<sub>x</sub>) control strategy is needed to reduce regional ozone levels in the Baton Rouge area, and measures are in place that will result in

substantial reductions in local NO<sub>x</sub> emissions. It appears that volatile organic compounds (VOC) and NO<sub>x</sub> reductions that have been made are adequate to prevent exceedances of the standard under most weather conditions except when HRVOC are present. The Department's research over the past three years has shown that releases of HRVOC have been associated with recent peaking episodes of elevated ozone that have led to exceedances of the 1-hour and 8-hour standards. Over this period of time, local industries handling the HRVOC have been asked to look at their operations and devise means to reduce the releases of these compounds. However, extensive sampling this summer shows releases of HRVOC to continue to be a problem. The Department has monitored over 100 releases of HRVOC between January and August of this year.

#### V.

In addition to the unhealthy air, the ozone exceedances experienced this summer now make it impossible for the Baton Rouge area to achieve attainment of the 1-hour ozone standard by the November 2005 deadline. This failure to achieve attainment could lead to the implementation of Section 185 annual penalty fees computed to be about \$100 million per year for industries in the 5-parish area.

#### VI.

Elevated ozone episodes this summer will also make it exceedingly difficult for the Baton Rouge area to achieve attainment of the 8-hour ozone standard by June of 2007 as required. Failure to achieve attainment by the 2007 deadline will likely result in a reclassification of the area upward from a "marginal" to a "moderate" classification and will likely bring additional control measures for the area.

## VII.

Five of the six exceedances in 2004 have been in the Baton Rouge downtown area with one exceedance at the Carville monitor. Wind direction data indicate that the ozone that caused the exceedance at Carville was transported from the downtown area. Data collected on days of exceedances strongly indicates that the HRVOC available for ozone formation came from sources in the local downtown area. Over 40% of the air samples taken this year contained ethylene and propylene.

## VIII.

The continuing episodes of spiking ozone levels lead to periods of unhealthy air quality, and continuing burdensome requirements on industry, local businesses, local government, and the general public. Thus the Department requires the information outlined below to develop ozone control measures to protect the health of the citizens of Louisiana.

### **ADMINISTRATIVE ORDER**

Based on the foregoing, Respondent is hereby ordered:

#### I.

To submit to the Department, for approval, a plan for a fenceline monitoring program. The Respondent shall submit this plan to the Department within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER** and implement the fenceline monitoring program by no later than March 1, 2005. At a minimum, the fenceline monitoring program shall include the requirements listed in Attachment 1.

II.

To conduct a comprehensive environmental audit of the facility's operations for the purposes of documenting all potential sources of releases of HRVOC and to perform testing of certain specified emissions sources. An environmental audit and testing plan shall be submitted to the Department for approval within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER**. At a minimum, the environmental audit and testing plan shall include the requirements listed in Attachment 2. The Respondent shall implement the approved environmental audit and testing plan by no later than December 1, 2004. The results of the environmental audit and testing shall be submitted to the Department by no later than March 1, 2005.

III.

To the extent required by law, further proceedings relating to this **ADMINISTRATIVE ORDER** will be governed by the Administrative Procedure Act, La. R.S. 49:950, et seq.

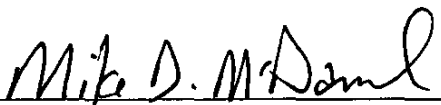
IV.

For each action or event described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

V.

This **ADMINISTRATIVE ORDER** is effective upon receipt.

Baton Rouge, Louisiana, this 6<sup>th</sup> day of October, 2004.

  
\_\_\_\_\_  
Mike D. McDaniel, Ph.D.  
Secretary

Copies of correspondence should be sent to:

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312  
Attention: Jane LaCour

# Attachment 1

## Fence line Air Monitoring Requirements

Each facility shall be required to install a minimum of four air-monitoring stations. These stations should be located on or near the facility property boundary with at least one station positioned on each of the four main compass points (north, east, south, west) from the center of the facility. At least two of the stations shall be supplemented with a 10-meter meteorological tower equipped with sensors to continuously measure wind speed and direction. One meteorological tower shall be located in the predominant downwind direction from the center of the facility and another located in the predominant upwind direction from the center of the facility. The meteorological data shall be recorded & submitted to the Department as 10-minute averages.

Each monitoring station shall be equipped with a continuous total non-methane organic carbon (TNMOC) analyzer capable of detecting VOC concentrations of 0.1 ppm or less for each 10-minute period. This analyzer shall be operated year round with a data completeness of at least 85%. All data shall be recorded and submitted to the Department (Excel format) as 10-minute averages. The analyzer shall be integrated with a summa canister sampler capable of automatically collecting a 20-minute air sample (trigger sample) when the analyzer exceeds a predetermined concentration threshold. This threshold should be adjusted to insure a minimum of 5 samples are triggered each month when the meteorological data indicate the sample was impacted by emissions from the facility. Each canister sample shall be analyzed via gas chromatography/flame ionization detection for a compound target list approved by the Department. This target list shall include all ozone precursor VOCs emitted in significant amounts and any of the highly reactive volatile organic compounds emitted by the facility. The highly reactive VOCs include ethylene, propylene, butanes, 1,3-butadiene, toluene and xylenes. The analytical & quality assurance procedures shall be consistent with the ozone precursor analysis method outlined in EPA 600-R-98/161. The minimum detection limits for the analysis as calculated by the method set forth in 40 CFR Part 36(b) shall be no greater than 10 ppbC for each of the target analytes. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

In addition, each facility shall install a summa canister sampler capable of collecting a 24-hour integrated sample once every six days. The sampler may be located at one of the air monitoring stations or as an alternative may be installed off-site in a location determined to be in the predominant down-wind direction. This sample shall be analyzed by EPA method TO-14 or TO-15 to determine if any of the Louisiana ambient air quality standards for VOCs (see LAC 33:III.5112, Table 51.2) are being exceeded. The target analytes for these samples shall include at least the following compounds: 1,3-butadiene, vinyl chloride, 1,2-dichloroethane, benzene, toluene, chloroform, and methylene chloride. The minimum detection limits for each of the target analytes as calculated by the method set forth in 40 CFR Part 36(b) shall be the lesser of 0.5 ppbv or the applicable Louisiana annual average ambient air standard. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.



## Attachment 2

### ExxonMobil Corporation Baton Rouge Polyolefins Plant

#### Environmental Program Audit and Testing

The respondent shall perform the following audits and source testing of units at their site. An emission inventory for 2004 operations, reflecting the results of the audits and source testing, shall be submitted by March 1, 2005.

1. Conduct an audit of the entire facility to document all units that handle highly reactive volatile organic compounds (HRVOC).
2. Conduct a comprehensive environmental audit of all units at the facility where highly reactive volatile organic compounds (HRVOC) are handled for the purpose of documenting all potential release sources of HRVOC. These potential sources shall include a) routine or continuous emission sources, b) non-routine sources such as from equipment openings/clearings, start-ups/shutdowns, malfunctions, upsets, flaring, loading/unloadings, maintenance activities and leaks, c) emergency/safety emissions sources, and d) any other emission source not listed. Small sources such as analyzer vents and sources from incoming and outgoing pipelines shall be included in the audit. Fugitive emission sources are addressed in Item 2 below.

For each documented source, the respondent shall provide a) description of the source including the Department's point identification for previously reported sources, b) amount of each HRVOC in the emission stream in pounds per year for routine sources and in total pounds per event for other sources, and c) description of the methodology used to determine the amount. For non-routine sources and emergency/safety emissions sources, the respondent shall also include the date, time and duration of each release and a description of the reason for the release.

3. Conduct a comprehensive audit of the leak detection and repair (LDAR) program where HRVOC are handled to document that all regulated sources are included. All sources that are found to be missing from the LDAR program shall be brought into the program within 30 days, monitored and the results reported in the results report. Additionally, all tagged, leaking sources in HRVOC service from the current LDAR program shall be listed along with the amount of each HRVOC leaking in pounds per hour, the date that the leak was located, and the date that the leak will be repaired.
4. Conduct testing or other Department's approved methodology to confirm emissions estimates for HRVOC transport activities including loading, unloading and storage, and incoming and outgoing pipelines, associated with the facility.

5. Conduct Department-approved testing of all flares that handle HRVOC and have a reported destruction efficiency greater than ninety-eight (98) percent to confirm the claimed destruction efficiency.

6. Conduct sampling of all inlets to cooling towers with potential HRVOC emissions. The results report shall include the sampling results, a description of the source of any HRVOC found in the sample and the total amount in pounds of each HRVOC that was emitted.

7. Conduct testing, following the Department's stack testing guidelines, of the HRVOC sources listed below for the purpose of confirming emissions estimates. Any deviations from stack testing guidelines shall be approved by the Department prior to testing.

Weigh Feeder Vent, point number PP07, ethylene and propylene  
Homogenizer Vent, point number PP08, ethylene and propylene  
Pellet Dryer Vent, point number PP09, ethylene and propylene  
Pellet Storage Vent, point number PP12, ethylene and propylene



**State of Louisiana**  
**Department of Environmental Quality**



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

October 6, 2004

MIKE D. McDANIEL, Ph.D.  
SECRETARY

CERTIFIED MAIL (7001 0320 0002 6643 4464)  
RETURN RECEIPT REQUESTED

**EXXON MOBIL CORPORATION**

c/o Corporation Service Company  
Agent of Service  
320 Somerulos Street  
Baton Rouge, Louisiana 70802

**RE: ADMINISTRATIVE ORDER**  
**ENFORCEMENT TRACKING NO. AE-AO-04-0298**  
**AGENCY INTEREST NO. 286**

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **ADMINISTRATIVE ORDER** is hereby served on **EXXON MOBIL CORPORATION (RESPONDENT)**.

Any questions concerning this action should be directed to Sonya Eastern at (225) 219-3937 or Jane LaCour at (225) 219-3716.

Sincerely,

Peggy M. Hatch  
Administrator  
Enforcement Division

PMH/JL/sf  
Alt ID No. 0840-00014  
Attachment



OFFICE OF ENVIRONMENTAL COMPLIANCE • P.O. BOX 4312 • BATON ROUGE, LOUISIANA 70821-4312

AN EQUAL OPPORTUNITY EMPLOYER



c: Exxon Mobil Corporation  
c/o Mr. W. D. Fellows  
Environmental Manager  
Baton Rouge Chemical Plant  
Post Office Box 551  
Baton Rouge, Louisiana 70821

**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE**

**IN THE MATTER**

**EXXON MOBIL CORPORATION  
EAST BATON ROUGE PARISH  
ALT ID NO. 0840-00014**

**PROCEEDINGS UNDER THE LOUISIANA  
ENVIRONMENTAL QUALITY ACT,  
La. R.S. 30:2001, ET SEQ.**

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**ENFORCEMENT TRACKING NO.**

**AE-AO-04-0298**

**AGENCY INTEREST NO.**

**286**

**ADMINISTRATIVE ORDER**

The following **ADMINISTRATIVE ORDER** is issued to **EXXON MOBIL CORPORATION (RESPONDENT)** by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2011(D)(6) and (D)(14).

**FINDINGS OF FACT**

**I.**

The Respondent owns and/or operates the Baton Rouge Chemical Plant located at 4999 Scenic Highway in Baton Rouge, East Baton Rouge Parish, Louisiana, which is within the 5-parish Baton Rouge Ozone Nonattainment area and is within close proximity to the Baton Rouge downtown area. The most recent emission inventory submitted by the Respondent for this facility

indicates that highly reactive volatile organic compounds (HRVOC) are emitted from the facility. For purposes of this **ADMINISTRATIVE ORDER**, HRVOC shall consist of 1,3-butadiene, butenes, ethylene, propylene, toluene and xylenes. The Respondent's facility operates under multiple air permits.

## II.

The Baton Rouge area is in violation of both the 1-hour and 8-hour National Ambient Air Quality Standard. Ozone concentrations above these standards are a public health concern. The Baton Rouge area was classified as a "serious" ozone nonattainment area for the 1-hour ozone standard under the Clean Air Act Amendments of 1990 and given until November 1999 to achieve attainment of the standard. Despite good progress, the area failed to achieve attainment of the standard by the 1999 deadline. In June 2003, the 5-parish Baton Rouge Ozone Nonattainment area was reclassified to the next higher or "severe" classification by operation of law and given a new attainment date of November 2005. The reclassification to "severe" status brought with it many new requirements such as reformulated gasoline, regulation of smaller businesses, increased emission offsets for new sources or modification of existing sources, and possible Clean Air Act Section 185 penalty fees if the area fails to attain the standard by the November 2005 deadline. These measures will have a serious economic impact on Louisiana.

## III.

In June of 2004, EPA began implementing a new 8-hour ozone standard, under which the 5-parish Baton Rouge area was designated nonattainment and assigned a "marginal" classification with an attainment date of June 2007.

#### IV.

Ozone modeling has indicated that a nitrogen oxides (NO<sub>x</sub>) control strategy is needed to reduce regional ozone levels in the Baton Rouge area, and measures are in place that will result in substantial reductions in local NO<sub>x</sub> emissions. It appears that volatile organic compounds (VOC) and NO<sub>x</sub> reductions that have been made are adequate to prevent exceedances of the standard under most weather conditions except when HRVOC are present. The Department's research over the past three years has shown that releases of HRVOC have been associated with recent peaking episodes of elevated ozone that have led to exceedances of the 1-hour and 8-hour standards. Over this period of time, local industries handling the HRVOC have been asked to look at their operations and devise means to reduce the releases of these compounds. However, extensive sampling this summer shows releases of HRVOC to continue to be a problem. The Department has monitored over 100 releases of HRVOC between January and August of this year.

#### V.

In addition to the unhealthful air, the ozone exceedances experienced this summer now make it impossible for the Baton Rouge area to achieve attainment of the 1-hour ozone standard by the November 2005 deadline. This failure to achieve attainment could lead to the implementation of Section 185 annual penalty fees computed to be about \$100 million per year for industries in the 5-parish area.

#### VI.

Elevated ozone episodes this summer will also make it exceedingly difficult for the Baton Rouge area to achieve attainment of the 8-hour ozone standard by June of 2007 as required. Failure to achieve attainment by the 2007 deadline will likely result in a reclassification of the area upward

from a "marginal" to a "moderate" classification and will likely bring additional control measures for the area.

## VII.

Five of the six exceedances in 2004 have been in the Baton Rouge downtown area with one exceedance at the Carville monitor. Wind direction data indicate that the ozone that caused the exceedance at Carville was transported from the downtown area. Data collected on days of exceedances strongly indicate that the HRVOC available for ozone formation came from sources in the local downtown area. Over 40% of the air samples taken this year contained ethylene and propylene.

## VIII.

The continuing episodes of spiking ozone levels lead to periods of unhealthy air quality, and continuing burdensome requirements on industry, local businesses, local government, and the general public. Thus the Department requires the information outlined below to develop ozone control measures to protect the health of the citizens of Louisiana.

### **ADMINISTRATIVE ORDER**

Based on the foregoing, Respondent is hereby ordered:

#### I.

To submit to the Department, for approval, a plan for a fenceline monitoring program. The Respondent shall submit this plan to the Department within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER** and implement the fenceline monitoring program by no later than



March 1, 2005. At a minimum, the fenceline monitoring program shall include the requirements listed in Attachment 1.

## II.

To conduct a comprehensive environmental audit of the facility's operations for the purposes of documenting all potential sources of releases of HRVOC and to perform testing of certain specified emissions sources. An environmental audit and testing plan shall be submitted to the Department for approval within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER**. At a minimum, the environmental audit and testing plan shall include the requirements listed in Attachment 2. The Respondent shall implement the approved environmental audit and testing plan by no later than December 1, 2004. The results of the environmental audit and testing shall be submitted to the Department by no later than March 1, 2005.

## III.

To the extent required by law, further proceedings relating to this **ADMINISTRATIVE ORDER** will be governed by the Administrative Procedure Act, La. R.S. 49:950, et seq.


## IV.

For each action or event described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

V.

This **ADMINISTRATIVE ORDER** is effective upon receipt.

Baton Rouge, Louisiana, this 6<sup>th</sup> day of October, 2004.

  
\_\_\_\_\_  
Mike D. McDaniel, Ph.D.  
Secretary

Copies of correspondence should be sent to:

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312  
Attention: Jane LaCour

# Attachment 1

## Fence line Air Monitoring Requirements

Each facility shall be required to install a minimum of four air-monitoring stations. These stations should be located on or near the facility property boundary with at least one station positioned on each of the four main compass points (north, east, south, west) from the center of the facility. At least two of the stations shall be supplemented with a 10-meter meteorological tower equipped with sensors to continuously measure wind speed and direction. One meteorological tower shall be located in the predominant downwind direction from the center of the facility and another located in the predominant upwind direction from the center of the facility. The meteorological data shall be recorded & submitted to the Department as 10-minute averages.

Each monitoring station shall be equipped with a continuous total non-methane organic carbon (TNMOC) analyzer capable of detecting VOC concentrations of 0.1 ppm or less for each 10-minute period. This analyzer shall be operated year round with a data completeness of at least 85%. All data shall be recorded and submitted to the Department (Excel format) as 10-minute averages. The analyzer shall be integrated with a summa canister sampler capable of automatically collecting a 20-minute air sample (trigger sample) when the analyzer exceeds a predetermined concentration threshold. This threshold should be adjusted to insure a minimum of 5 samples are triggered each month when the meteorological data indicate the sample was impacted by emissions from the facility. Each canister sample shall be analyzed via gas chromatography/flame ionization detection for a compound target list approved by the Department. This target list shall include all ozone precursor VOCs emitted in significant amounts and any of the highly reactive volatile organic compounds emitted by the facility. The highly reactive VOCs include ethylene, propylene, butanes, 1,3-butadiene, toluene and xylenes. The analytical & quality assurance procedures shall be consistent with the ozone precursor analysis method outlined in EPA 600-R-98/161. The minimum detection limits for the analysis as calculated by the method set forth in 40 CFR Part 36(b) shall be no greater than 10 ppbC for each of the target analytes. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

In addition, each facility shall install a summa canister sampler capable of collecting a 24-hour integrated sample once every six days. The sampler may be located at one of the air monitoring stations or as an alternative may be installed off-site in a location determined to be in the predominant down-wind direction. This sample shall be analyzed by EPA method TO-14 or TO-15 to determine if any of the Louisiana ambient air quality standards for VOCs (see LAC 33:III.5112, Table 51.2) are being exceeded. The target analytes for these samples shall include at least the following compounds: 1,3-butadiene, vinyl chloride, 1,2-dichloroethane, benzene, toluene, chloroform, and methylene chloride. The minimum detection limits for each of the target analytes as calculated by the method set forth in 40 CFR Part 36(b) shall be the lesser of 0.5 ppbv or the applicable Louisiana annual average ambient air standard. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

## Attachment 2

### ExxonMobil Corporation Baton Rouge Chemical Plant Environmental Program Audit and Testing

The respondent shall perform the following audits and source testing of units at their site. An emission inventory for 2004 operations, reflecting the results of the audits and source testing, shall be submitted by March 1, 2005.

1. Conduct an audit of the entire facility to document all units that handle highly reactive volatile organic compounds (HRVOC).
2. Conduct a comprehensive environmental audit of all units at the facility where highly reactive volatile organic compounds (HRVOC) are handled for the purpose of documenting all potential release sources of HRVOC. These potential sources shall include a) routine or continuous emission sources, b) non-routine sources such as from equipment openings/clearings, start-ups/shutdowns, malfunctions, upsets, flaring, loading/unloadings, maintenance activities and leaks, c) emergency/safety emissions sources, and d) any other emission source not listed. Small sources such as analyzer vents and sources from incoming and outgoing pipelines shall be included in the audit. Fugitive emission sources are addressed in Item 2 below.

For each documented source, the respondent shall provide a) description of the source including the Department's point identification for previously reported sources, b) amount of each HRVOC in the emission stream in pounds per year for routine sources and in total pounds per event for other sources, and c) description of the methodology used to determine the amount. For non-routine sources and emergency/safety emissions sources, the respondent shall also include the date, time and duration of each release and a description of the reason for the release.

3. Conduct a comprehensive audit of the leak detection and repair (LDAR) program where HRVOC are handled to document that all regulated sources are included. All sources that are found to be missing from the LDAR program shall be brought into the program within 30 days, monitored and the results reported in the results report. Additionally, all tagged, leaking sources in HRVOC service from the current LDAR program shall be listed along with the amount of each HRVOC leaking in pounds per hour, the date that the leak was located, and the date that the leak will be repaired.
4. Conduct testing or other departmental approved methodology to confirm emissions estimates for HRVOC transport activities including loading, unloading and storage, and incoming and outgoing pipelines, associated with the facility.

5. Conduct Department-approved testing of all flares that handle HRVOC and have a reported destruction efficiency greater than ninety-eight (98) percent to confirm the claimed destruction efficiency.

6. Conduct sampling of all inlets to cooling towers with potential HRVOC emissions. The results report shall include the sampling results, a description of the source of any HRVOC found in the sample and the total amount in pounds of each HRVOC that was emitted.

7. Conduct testing, following the Department's stack testing guidelines, of the HRVOC sources listed below for the purpose of confirming emissions estimates. Any deviations from stack testing guidelines shall be approved by the Department prior to testing.

Vacuum Vent, point number 5U, toluene and xylenes

C601B East Separation Gas Vent, point number KV, ethylene and propylene

C602 West Separation Gas Vent, point number KS, ethylene and propylene

C601A West Separation Gas Vent, point number KU, ethylene and propylene

OLA-2x-Maintrain, point number RE, HRVOC



**State of Louisiana**  
**Department of Environmental Quality**



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

October 6, 2004

MIKE D. McDANIEL, Ph.D.  
SECRETARY

CERTIFIED MAIL (7002 2030 0002 8909 6321)  
RETURN RECEIPT REQUESTED

**EXXON MOBIL CORPORATION**  
c/o Corporation Service Company  
Agent of Service  
320 Somerulos Street  
Baton Rouge, Louisiana 70802-6129

**RE: ADMINISTRATIVE ORDER**  
**ENFORCEMENT TRACKING NO. AE-AO-04-0295**  
**AGENCY INTEREST NO. 285**

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **ADMINISTRATIVE ORDER** is hereby served on **EXXON MOBIL CORPORATION (RESPONDENT)**.

Any questions concerning this action should be directed to Sonya Eastern at (225) 219-3937 or Jane LaCour at (225) 219-3716.

Sincerely,

Peggy M. Hatch  
Administrator  
Enforcement Division

PMH/JCA/jl  
Alt ID No. 0840-00018  
Attachment

c: Exxon Mobil Corporation  
c/o Mr. Richard Mohring, Plant Manager  
Baton Rouge Plastics Plant  
P.O. Box 1607  
Baton Rouge, LA 70821

**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE**

**IN THE MATTER**

**EXXON MOBIL CORPORATION  
EAST BATON ROUGE PARISH  
ALT ID NO. 0840-00018**

**PROCEEDINGS UNDER THE LOUISIANA  
ENVIRONMENTAL QUALITY ACT,  
La. R.S. 30:2001, ET SEQ.**

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**ENFORCEMENT TRACKING NO.**

**AE-AO-04-0295**

**AGENCY INTEREST NO.**

**285**

**ADMINISTRATIVE ORDER**

The following **ADMINISTRATIVE ORDER** is issued to **EXXON MOBIL CORPORATION (RESPONDENT)** by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2011(D)(6) and (D)(14).

**FINDINGS OF FACT**

**I.**

The Respondent owns and/or operates the Baton Rouge Plastics Plant located at 11675 Scotland Avenue in Baton Rouge, East Baton Rouge Parish, Louisiana, which is within the 5-parish Baton Rouge Ozone Nonattainment area and is within close proximity to the Baton Rouge downtown area. The most recent emission inventory submitted by the Respondent for this facility indicates that highly reactive volatile organic compounds (HRVOC) are emitted from the facility.



For purposes of this **ADMINISTRATIVE ORDER**, HRVOC shall consist of 1,3-butadiene, butenes, ethylene, propylene, toluene and xylenes. The facility operates under Air Permit Number 0840-00018-V2 issued on October 31, 2001.

## II.

The Baton Rouge area is in violation of both the 1-hour and 8-hour National Ambient Air Quality Standard. Ozone concentrations above these standards are a public health concern. The Baton Rouge area was classified as a "serious" ozone nonattainment area for the 1-hour ozone standard under the Clean Air Act Amendments of 1990 and given until November 1999 to achieve attainment of the standard. Despite good progress, the area failed to achieve attainment of the standard by the 1999 deadline. In June 2003, the 5-parish Baton Rouge Ozone Nonattainment area was reclassified to the next higher or "severe" classification by operation of law and given a new attainment date of November 2005. The reclassification to "severe" status brought with it many new requirements such as reformulated gasoline, regulation of smaller businesses, increased emission offsets for new sources or modification of existing sources, and possible Clean Air Act Section 185 penalty fees if the area fails to attain the standard by the November 2005 deadline. These measures will have a serious economic impact on Louisiana.

## III.

In June of 2004, EPA began implementing a new 8-hour ozone standard, under which the 5-parish Baton Rouge area was designated nonattainment and assigned a "marginal" classification with an attainment date of June 2007.

## IV.

Ozone modeling has indicated that a nitrogen oxides (NO<sub>x</sub>) control strategy is needed to reduce regional ozone levels in the Baton Rouge area, and measures are in place that will result in

substantial reductions in local NO<sub>x</sub> emissions. It appears that volatile organic compounds (VOC) and NO<sub>x</sub> reductions that have been made are adequate to prevent exceedances of the standard under most weather conditions except when HRVOC are present. The Department's research over the past three years has shown that releases of HRVOC have been associated with recent peaking episodes of elevated ozone that have led to exceedances of the 1-hour and 8-hour standards. Over this period of time, local industries handling the HRVOC have been asked to look at their operations and devise means to reduce the releases of these compounds. However, extensive sampling this summer shows releases of HRVOC to continue to be a problem. The Department has monitored over 100 releases of HRVOC between January and August of this year.

#### V.

In addition to the unhealthful air, the ozone exceedances experienced this summer now make it impossible for the Baton Rouge area to achieve attainment of the 1-hour ozone standard by the November 2005 deadline. This failure to achieve attainment could lead to the implementation of Section 185 annual penalty fees computed to be about \$100 million per year for industries in the 5-parish area.

#### VI.

Elevated ozone episodes this summer will also make it exceedingly difficult for the Baton Rouge area to achieve attainment of the 8-hour ozone standard by June of 2007 as required. Failure to achieve attainment by the 2007 deadline will likely result in a reclassification of the area upward from a "marginal" to a "moderate" classification and will likely bring additional control measures for the area.

## VII.

Five of the six exceedances in 2004 have been in the Baton Rouge downtown area with one exceedance at the Carville monitor. Wind direction data indicate that the ozone that caused the exceedance at Carville was transported from the downtown area. Data collected on days of exceedances strongly indicates that the HRVOC available for ozone formation came from sources in the local downtown area. Over 40% of the air samples taken this year contained ethylene and propylene.

## VIII.

The continuing episodes of spiking ozone levels lead to periods of unhealthy air quality, and continuing burdensome requirements on industry, local businesses, local government, and the general public. Thus the Department requires the information outlined below to develop ozone control measures to protect the health of the citizens of Louisiana.

### **ADMINISTRATIVE ORDER**

Based on the foregoing, Respondent is hereby ordered:

#### I.

To submit to the Department, for approval, a plan for a fenceline monitoring program. The Respondent shall submit this plan to the Department within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER** and implement the fenceline monitoring program by no later than March 1, 2005. At a minimum, the fenceline monitoring program shall include the requirements listed in Attachment 1.

II.

To conduct a comprehensive environmental audit of the facility's operations for the purposes of documenting all potential sources of releases of HRVOC and to perform testing of certain specified emissions sources. An environmental audit and testing plan shall be submitted to the Department for approval within forty-five (45) days of receipt of this **ADMINISTRATIVE ORDER**. At a minimum, the environmental audit and testing plan shall include the requirements listed in Attachment 2. The Respondent shall implement the approved environmental audit and testing plan by no later than December 1, 2004. The results of the environmental audit and testing shall be submitted to the Department by no later than March 1, 2005.

III.

To the extent required by law, further proceedings relating to this **ADMINISTRATIVE ORDER** will be governed by the Administrative Procedure Act, La. R.S. 49:950, et seq.


IV.

For each action or event described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

V.

This **ADMINISTRATIVE ORDER** is effective upon receipt.

Baton Rouge, Louisiana, this 6<sup>th</sup> day of October, 2004.

  
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Mike D. McDaniel, Ph.D.  
Secretary

Copies of correspondence should be sent to:

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312  
Attention: Jane LaCour

# Attachment 1

## Fence line Air Monitoring Requirements

Each facility shall be required to install a minimum of four air-monitoring stations. These stations should be located on or near the facility property boundary with at least one station positioned on each of the four main compass points (north, east, south, west) from the center of the facility. At least two of the stations shall be supplemented with a 10-meter meteorological tower equipped with sensors to continuously measure wind speed and direction. One meteorological tower shall be located in the predominant downwind direction from the center of the facility and another located in the predominant upwind direction from the center of the facility. The meteorological data shall be recorded & submitted to the Department as 10-minute averages.

Each monitoring station shall be equipped with a continuous total non-methane organic carbon (TNMOC) analyzer capable of detecting VOC concentrations of 0.1 ppm or less for each 10-minute period. This analyzer shall be operated year round with a data completeness of at least 85%. All data shall be recorded and submitted to the Department (Excel format) as 10-minute averages. The analyzer shall be integrated with a summa canister sampler capable of automatically collecting a 20-minute air sample (trigger sample) when the analyzer exceeds a predetermined concentration threshold. This threshold should be adjusted to insure a minimum of 5 samples are triggered each month when the meteorological data indicate the sample was impacted by emissions from the facility. Each canister sample shall be analyzed via gas chromatography/flame ionization detection for a compound target list approved by the Department. This target list shall include all ozone precursor VOCs emitted in significant amounts and any of the highly reactive volatile organic compounds emitted by the facility. The highly reactive VOCs include ethylene, propylene, butanes, 1,3-butadiene, toluene and xylenes. The analytical & quality assurance procedures shall be consistent with the ozone precursor analysis method outlined in EPA 600-R-98/161. The minimum detection limits for the analysis as calculated by the method set forth in 40 CFR Part 36(b) shall be no greater than 10 ppbC for each of the target analytes. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

In addition, each facility shall install a summa canister sampler capable of collecting a 24-hour integrated sample once every six days. The sampler may be located at one of the air monitoring stations or as an alternative may be installed off-site in a location determined to be in the predominant down-wind direction. This sample shall be analyzed by EPA method TO-14 or TO-15 to determine if any of the Louisiana ambient air quality standards for VOCs (see LAC 33:III.5112, Table 51.2) are being exceeded. The target analytes for these samples shall include at least the following compounds: 1,3-butadiene, vinyl chloride, 1,2-dichloroethane, benzene, toluene, chloroform, and methylene chloride. The minimum detection limits for each of the target analytes as calculated by the method set forth in 40 CFR Part 36(b) shall be the lesser of 0.5 ppbv or the applicable Louisiana annual average ambient air standard. All data shall be submitted to the Department on a monthly basis beginning April 15, 2005 with subsequent data submissions due on the 15<sup>th</sup> of each month thereafter.

## Attachment 2

### ExxonMobil Corporation Baton Rouge Plastics Plant

#### Environmental Program Audit and Testing

The respondent shall perform the following audits and source testing of units at their site. An emission inventory for 2004 operations, reflecting the results of the audits and source testing, shall be submitted by March 1, 2005.

1. Conduct an audit of the entire facility to document all units that handle highly reactive volatile organic compounds (HRVOC).
2. Conduct a comprehensive environmental audit of all units at the facility where highly reactive volatile organic compounds (HRVOC) are handled for the purpose of documenting all potential release sources of HRVOC. These potential sources shall include a) routine or continuous emission sources, b) non-routine sources such as from equipment openings/clearings, start-ups/shutdowns, malfunctions, upsets, flaring, loading/unloadings, maintenance activities and leaks, c) emergency/safety emissions sources, and d) any other emission source not listed. Small sources such as analyzer vents and sources from incoming and outgoing pipelines shall be included in the audit. Fugitive emission sources are addressed in Item 2 below.

For each documented source, the respondent shall provide a) description of the source including the Department's point identification for previously reported sources, b) amount of each HRVOC in the emission stream in pounds per year for routine sources and in total pounds per event for other sources, and c) description of the methodology used to determine the amount. For non-routine sources and emergency/safety emissions sources, the respondent shall also include the date, time and duration of each release and a description of the reason for the release.

3. Conduct a comprehensive audit of the leak detection and repair (LDAR) program where HRVOC are handled to document that all regulated sources are included. All sources that are found to be missing from the LDAR program shall be brought into the program within 30 days, monitored and the results reported in the results report. Additionally, all tagged, leaking sources in HRVOC service from the current LDAR program shall be listed along with the amount of each HRVOC leaking in pounds per hour, the date that the leak was located, and the date that the leak will be repaired.
4. Conduct testing or other Department-approved methodology to confirm emissions estimates for HRVOC transport activities including loading, unloading and storage, and incoming and outgoing pipelines, associated with the facility.

5. Conduct Department-approved testing of all flares that handle HRVOC and have a reported destruction efficiency greater than ninety-eight (98) percent to confirm the claimed destruction efficiency.

6. Conduct sampling of all inlets to cooling towers with potential HRVOC emissions. The results report shall include the sampling results, a description of the source of any HRVOC found in the sample and the total amount in pounds of each HRVOC that was emitted.

7. Conduct testing, following the Department's stack testing guidelines, of the HRVOC sources listed below for the purpose of confirming emissions estimates. Any deviations from stack testing guidelines shall be approved by the Department prior to testing.

Pellet Dryer Exhaust Blower B, point number 01-95(17), ethylene

Blender V402K, point number 01-95(23), ethylene

Pellet Dryer Exhaust Blower C, point number 01-95(31), ethylene

Blender BL-221B, point number 01-95(65), ethylene

Pellet Dryer Exhaust Blower BR-2100F, point number 01-95(93), ethylene